THE

ARCHITECTURAL MAGAZINE.

MARCH, 1836.

ORIGINAL COMMUNICATIONS.

ART. I. *A Proposal for publishing the unsuccessful Designs for the Houses of Parliament.* By Mr. WEALE. With a Postscript by the Conductor, recommending the Publication of those Designs also for which Premiums were awarded.

BEING much interested and most anxious for the promotion of architecture in this country, I ventured to obtrude the following ideas and suggestions at the meeting of the candidates for the parliamentary edifices, which took place at the Thatched House Tavern, St. James's Street, on February 4. A strong desire has been expressed that the public should be afforded the means of judging of the respective merits of the designs for rebuilding the Houses of Parliament; and confident expectation has been entertained that steps would be taken to gratify so laudable a curiosity: a feeling, which not only betokens the interest at present taken in architecture generally, but also a laudable anxiety that so important a national structure should prove to after generations a worthy monument of our national taste, and of the architectural talent of the present age.

Such being the case, the public mind may be said to be in favour of any scheme by which it may be enabled to learn, not only how far the choice which has actually been made is discreet and impartial, but also what is the aggregate talent that has been put forth on this occasion. For this purpose, it has been suggested that there should be a public exhibition of all the drawings; but, whether that plan be adopted or not, it is no less desirable that they should be engraved and published collectively in a folio volume.

Among the numerous reasons that might be adduced in favour of undertaking such a work, it is not the least, that, although an exhibition of the original drawings might be the more popular mode of the two, the embodying all in a work would be the more permanent mode of recording them, and, also, that it would be one by which they could be diffused through all parts of the country, and, in all probability, extended to many places abroad.

Such a work would become a lasting memorial of the varied talent and taste manifested in the designs; and, while all the competitors would have the satisfaction of finding that their anxious study had not been thrown away upon a merely temporary purpose, there is hardly one, perhaps, who might not be more or less benefited by his name, together with a specimen of his ability, being thus brought before the public. Even in those designs which may be inferior to the generality, or which else may, for some particular reason, have been deemed ineligible, there may, nevertheless, be very much to commend, and sufficient proof of both skill and taste. Hardly, indeed, is it to be supposed that public opinion will be perfectly unanimous in such matters; or, that each critic will bestow his preference so exclusively on any favourite design, as to be able to perceive no merit in the rest.

Independently of these views, there is another highly important consideration recommending what is above proposed; which is, that an opportunity, which, if passed over, may not again occur, now presents itself of enlisting general attention to that one of the fine arts, in regard to which, with the exception of the profession itself, and a very limited circle beyond it, apathy and indifference, with their consequent ignorance, may be said to predominate.

Here is an occasion where some interest for it would be pretty generally affected, if not felt; at the same time, the work itself would be of that nature as almost unavoidably to stimulate to more than superficial inspection; because, all the designs being for the same purpose, and accommodated to one site, hardly any one could help attempting to make some kind of comparison between them; and such an attempt would, of course, lead to such a careful examination of the designs, as would, probably, in many instances and in many minds, awaken a relish for the subject, and a favourable disposition towards it.

It is but policy to profit by adventitious circumstances, and turn them to the greatest possible account; whereas, should nothing further be done, it would argue something like indifference, on the part of the competitors, as to fame and the opinion of the public; at least, their reluctance to be at any further trouble, now that the decision has put an end to what was first the principal object of each individual, namely, the hope of pecuniary reward: the stir originally made respecting the competition would entirely die away, and all the reputation would be borne off by the architects whose designs have been selected.

In addition to the above arguments, it may be urged, that the publication of the designs in question might become a precedent for other occasions, whenever there should be a competition for any building of extraordinary importance; and it might so far operate very beneficially, by rendering those with whom the de-

cisions rest in some degree responsible for their choice, and amenable to public opinion.

Although the proposed volume would be a work of some magnitude, it might be brought out very expeditiously, would each architect, who should consent to have his design inserted in it, copy his own drawings on stone; so that the engraving would be executed simultaneously, and all completed within the time requisite for finishing a single set. Beyond the labour so bestowed, there would be no further risk on the part of the respective architects, as I would engage to furnish them with the lithographic stones, and to defray all the other expenses of the work, requiring only to be reimbursed out of the proceeds, and to receive the small commission of 5 per cent. for my own trouble, leaving whatever further it might produce to be shared by the authors of the designs. For, although I think so well of the scheme that I should be greatly disappointed were it not to realise something handsome, I am willing to forego profit in it as a speculation, by way of holding out all the encouragement that is in my power. At the same time, I do not profess to be altogether disinterested; because, for some of the reasons above assigned, I conceive that I should then be promoting an object likely to be very influential upon architecture, and its estimation in public opinion; and so far indirectly promoting that particular branch of the publishing trade which is connected with architecture, and to which I have exclusively devoted myself.

Should these considerations be entertained, I would propose that a publishing committee should be formed for the purpose of superintending the arrangement and the details of publication; and that each individual joining the undertaking should be required to subscribe to certain conditions, so as to insure the fulfilment of the suggestions here made.

JOHN WEALE.

Architectural Library, High Holborn, Feb. 10, 1836.

FOR the important reasons so clearly and forcibly assigned by Mr. Weale, we think that not only the designs which have been unsuccessful, but those also to which the premiums have been awarded, should be published. The British public is just beginning to exercise an opinion on matters of taste in arts and manufactures, and such a publication as that proposed would give a wonderful stimulus to architecture. All the public libraries throughout Europe and North America would be eager to possess a copy of the work; and we have no doubt that, in consequence of the recommendations of the Committee on the Fine Arts of the House of Commons, government would purchase a number of copies, and present them to Mechanics' Institutions, and other institutions to be formed in large towns, for the purpose of

encouraging art. A more liberal proposal than that made by Mr. Weale could not be made, and we have not a doubt but that it will be duly appreciated both by architects and the public. — *Cond.*

ART. II. *A new Site for the Houses of Parliament suggested, and the fundamental Principles on which they ought to be designed pointed out.* By the CONDUCTOR.

WE are glad to observe that the subject of the site for the proposed New Houses of Parliament has been brought before the members of that body by Mr. Hume. It has always appeared to us that the architects who were invited to send in designs should not only have been left to choose the style of architecture of the building, but also to suggest the site on which their designs might be most advantageously carried into execution. It will not be denied, we think, that, if the present Houses of Parliament had not existed where they do, no one would ever have thought, at the present day, of building them there. The situation is not only at one extremity of the metropolis, but it is so isolated as to be conveniently approachable only on one side; and, added to this, it is low, moist, and unhealthy.

When so important a public building as a senate house is about to be erected, the situation relatively to the other buildings of the metropolis, instead of being passed over as a matter requiring no consideration, ought, in our opinion, to be the first and most important point to which those invited to send designs ought to direct their attention; the second point ought to be the design of the building itself; and the third, the susceptibility of the site and the design for being connected with such other government buildings, either already existing, or to be built, as it might be found desirable to place near the legislative chambers. In short, in fixing on the site for so important a public building as the place of meeting for the grand legislative assembly of the country, the architect ought, in the choice of a situation, to be guided by fundamental principles of utility and arrangement rather than by precedent, prejudice, or accidental circumstances.

In order to give a slight general idea of the sort of view which we take of the subject, we shall suppose Leicester Square to be a suitable situation for the site of the new Houses of Parliament; and that it were practicable to clear away the houses in every direction, as far as the Haymarket, Gerard Street, St. Martin's Lane, and the National Gallery, on the north side of Trafalgar Square. This clearance would become requisite, not only to admit all the necessary appendages, but to provide the public

with an open space, equivalent to that of which they would be deprived by the loss of the present area of Leicester Square.

These preliminaries agreed on, we would commence, in the centre of the space so cleared, with a quadrangle of sufficient size for containing the Houses of Parliament, and the offices strictly connected with them. This quadrangle we would enclose by another, say at 50 or 60 ft. distance from it, in which we would place all those government offices connected with the civil service which it was desirable should be as near the House of Commons as possible; such, for example, as the Treasury, the Foreign Office, the Office of Public Works, &c. This second quadrangle we would surround by a third, in which might be contained the Courts of Law, and all the offices connected with the government taxes. These three concentric quadrangles (or they might be made concentric circles, or polygons, if such were thought preferable) would, we should suppose, afford every kind of accommodation requisite for the completion of the general idea which we have thrown out; and, if it were not deemed necessary to carry the whole design into execution at once, the central quadrangle, containing the Houses of Parliament and their offices, might be built, and the rest deferred; which would render unnecessary the clearing away of so many houses at one time.

In carrying such a design into execution, the following points should be attended to:—1. The diagonal line of the quadrangles ought to be in the direction of north and south, in order that the sun might not be too powerful on the windows on any one front, and in order that it might shine on every front, and more especially on every opening between the quadrangles, every day in the year; thus distributing light and heat with comparative equality, and drying up the damps every were. 2. The quadrangles ought to be intersected by several carriage-ways, in direct lines at right angles, from the central quadrangle to the extremities, terminating in grand archways, for the entrance and exit of carriages to every part of the buildings. 3. The quadrangles ought also to be intersected on the first, second, and third floors with passages crossing the open spaces and carriage-ways beneath, on covered suspension bridges; so that, from the Houses of Parliament in the centre, there might be direct communication by carriage-ways on the ground floor, and by passages on the first, second, and third floors, and also underground, to all the different exterior quadrangles. This would in effect render the whole one building, and would greatly facilitate the despatch of public business. 4. The lines of communication, in the separate ranges of building composing the quadrangles, should, in general, not be in exterior galleries, but through central passages, lighted from the roof. Exterior galleries, arcades, or colonnades, though imposing in an architectural point of view, are yet

very unsuitable to the thick atmosphere of London; as they tend greatly to darken the windows of the building they are attached to, and, consequently, must be very injurious in the case of rooms chiefly occupied by persons reading or writing. 5. All the buildings should be made fire-proof; and also, as far as practicable, all the furniture. For this purpose, slabs of slate might be used in panels, shelves, flaps, &c., and iron or copper in the styles, rails, mullions, &c.; and thus the use of wood might be almost dispensed with. 6. The whole might, to a certain extent, be lighted by gas lamps, placed close to the outside of the windows; and heated by steam from one or more boilers; but not to the exclusion of candles or lamps, or open fire-places, without which last, in all ordinary rooms, it is difficult to insure adequate ventilation. 7. Water should be conveyed to cisterns at short distances all over the roof, and supplied from them to every apartment by leaden pipes, which, in case of fire, would melt, and the water, with the steam that would be instantly produced, would extinguish the fire before it could spread any further. By the use of mercury, in small cylinders with pistons, in instruments not much larger than thermometers, communicating by wires with valves in the cisterns, the water might be admitted whenever the temperature of the room rose above a certain degree, say 130° or 150°; and this plan might be used with or without pipes of lead, so as at all events to insure a supply of water, without the intervention of human aid, whenever a fire broke out. We have mentioned Leicester Square as a desirable site, simply because it contains an open area in a central situation; but we by no means think it the only one. Mr. Raine has mentioned Charing Cross, and Mr. Hume has pointed out the space between Pall Mall and the Mall in St. James's Park; which last site has the advantage of being perfectly level; but we fear there is not width enough to furnish all the public offices that would be necessary, without infringing on Pall Mall, or, probably, St. James's Square, Soho Square, opened to St. Giles's Church on the one hand, and to Poland Street on the other; or Lincoln's Inn Fields, opened to Holborn and the Strand, would be suitable.

We consider it no objection to this plan, or to any other of the same kind, that premiums have already been awarded for designs adapted to the site at Westminster; on the contrary, we are of opinion that, if a second series of designs were required by government, the public and the architecture of the country would be gainers; and that the second series of designs would probably be much better than the first, from the knowledge gained by the architects while preparing their designs for the first competion. As human knowledgeis always progressive, the attention of no man can be long directed to any given subject,

without his acquiring fresh ideas concerning it, however extensive his previous knowledge of it may have been; and no person can see the manner in which another person has treated a subject which has engrossed a great portion of his own thoughts, without feeling his own stock of knowledge increased, and his particular opinions shaken or confirmed. The competition which has recently taken place, particularly if the designs are exhibited, will unquestionably contribute much, not only to the progress of architecture as a science, but also to the improvement of the public taste, by directing public attention to architectural designs.

We do not consider either the amount of the sum already laid out in premiums, or that which would be expended in procuring a new site, and the buildings which would necessarily require to be purchased to be cleared away, of any consequence when compared with the immense advantages which would result from combining together all the government offices connected with parliament, and which would admit of an indefinite extent of these offices at any future time, on every side; an advantage, which at no expense whatever can ever be obtained for the site at Westminster, on account of the proximity of the Thames. The great object is, for the government to consider the subject till they are quite certain that they are acting on the most comprehensive views of present and future usefulness, convenience, and architectural dignity; and we are quite certain that the public will go along with them, without regard to the expense.

We shall conclude with one remark, which is, that there can be no mode of rebuilding the Houses of Parliament on the site at Westminster that will not materially injure the exterior effect, not only of Westminster Hall, but of Westminster Abbey; and that the true way to show respect to those magnificent buildings is to repair them, and then to leave them as monuments for the admiration of the architectural antiquaries of future ages. If the New Houses of Parliament are built there, it will, in our opinion, at least, be equally a proof of want of antiquarian taste, and of comprehensive views of public utility.

Bayswater, Feb. 12. 1836.

ART. III. *Miscellaneous Notices respecting the Competition Designs for the New Houses of Parliament.*

As the subject of the *New Houses of Parliament* is, at the present time, of intense interest to architects, not only in itself, but because it is likely, we think, to lead to the reformation of the system of competition generally, we have considered it advisable to bring together the following notices under one head, in order that they may be easily referred to. (See also p. 131.)

The Premiums for the Designs for the Houses of Parliament have been awarded since our last; measures have been taken for the exhibition of the unsuccessful designs; and proposals have been made, as will be seen in p. 97., for publishing the whole of them. The number of competitors was 93; and the entire number of drawings sent in was 1400. The first premium, of 1500*l.*, was awarded to Charles Barry, Esq., the architect of the Travellers' Club House, of various churches and villas, and of the magnificent alterations now carrying on at Trentham Hall, &c. We are proud to add, that he is the author of some designs for villas, &c. in our *Encyclopædia of Cottage Architecture*. Mr. Barry's design for the Houses of Parliament is of the most magnificent description: he proposes to sweep away the whole of the existing buildings on the site of the present Houses of Parliament, with the exception of Westminster Hall, and to erect a quadrangular pile, with the principal front facing the Thames, and a tower in the centre, 170 ft. high. The three premiums of 500*l.* each were awarded to Mr. Robert Hamilton of Glasgow; and to Mr. J. C. Buckler, and Mr. J. Railton, of London. Mr. Hamilton, whose acquaintance we had the pleasure of forming many years ago, is the architect of that splendid pile, the Glasgow Exchange; of several churches in Glasgow, and villas in its neighbourhood; and of the extensive improvements now making at Hamilton Palace. Mr. J. C. Buckler is the architect of Cossy Hall, Norfolk, Mr. Dighton's model of which we noticed in Vol. I. p. 181: he is the son of the eminent antiquary of that name, who is author of engravings of Monastic Antiquities; and he is himself one of our most eminent architectural draughtsmen. In his design, we understand he proposes to restore St. Stephen's Chapel. Mr. Railton is a young architect, distinguished by some Grecian designs in the supplementary volume, lately published, to *Stuart's Athens*. On the whole, we believe that both the architects and the public are satisfied that the premiums have been awarded with impartiality. From the well-known eminent talents of Mr. Barry, it was, from the beginning, anticipated that he would carry off the first prize; and the second, it was conjectured, would be given to the architect of the Bank of England, from his high connexions with the aristocracy. It is worthy of remark that, with the exception of Mr. Railton, none of the gentlemen who have obtained prizes were regularly brought up to the profession; that is, articled to first-rate architects: at least, we have been informed that such is the case, and we are not at all surprised at it; since the genius which is sufficient to induce any young man to adopt a profession that he has not been regularly brought up to, will no doubt carry him farther in that profession than those who have been placed in it by any accidental circumstance of birth, convenience, or connexion. The unsuccessful designs are, with the permission and approbation of government, to be exhibited, forthwith, in the eastern wing, just completed, of the National Gallery now building in Trafalgar Square; and we shall probably be able to give some account of them in our next Number.

The Designs for the New Houses of Parliament.—The following is an extract from a letter which appeared in the *Morning Chronicle* of February 15.; and it affords the strongest reasons for the exhibition of the plans:—

"It appears to me that the unsuccessful candidates lie under the severest, the most cutting stigma which it is possible for the commissioners to inflict upon them; viz. that out of the whole 93 rejected designs not one was deemed worthy to receive the fifth premium of 500*l.*, which Parliament empowered them to bestow. I am informed that the commissioners have not hesitated to declare, that, with the exception of the four designs selected, there was nothing worth notice placed before them. That such is really their opinion is clearly proved, by their withholding a part of the compensation which Parliament placed at their disposal; they being required, by the 32d resolution of the Select Committee, to 'select and classify such of the plans, being not less than three, or more than five in number, as shall seem to them most worthy of attention.'

"In this painful predicament, the architects have but one course to pursue; in which, fortunately, they have the sanction of the present enlightened government. The use of the east wing of the new National Gallery has been kindly conceded for the purpose of forming a public exhibition of the rejected designs; and it is hoped that every architect will avail himself of this opportunity of contributing to remove the reproach of *incompetence* which now rests upon so large a portion of the profession. But this is not all that the public expect: it is hoped that the government will follow up their own straightforward honourable principles, by exhibiting, at the same time, those designs which have obtained the rewards; as, by this means alone can it be proved to *demonstration* that the premiums have been fairly bestowed, or properly withheld. It is due to the honourable commissioners to put an end at once, and for ever, to all surmises derogatory to their impartiality, their taste, or their judgment. It is due, in an especial manner, to the successful architects themselves: their just and honourable ambition cannot rest ratisfied with the unratified decision of the commissioners alone: but, above all, it is due to the public, whose property the successful designs are become, that, in a matter of this national importance, in which the whole energies of a highly talented and educated profession have been brought into action, every thing should be clear as day, so as to avoid even the shadow of a suspicion of unfairness or favouritism. Nothing that is now urged is intended to convey the slightest imputation upon the decision of the commissioners. The sterling merit of Charles Barry is so well known, that, long before the designs were sent in, it was the general opinion of the profession that he would bear off the prize; his name, therefore, at the head of the list, is all but a guarantee for the sound discrimination of the commissioners: still the public, also, have a right to be satisfied; and this can only be effected by the exhibition of *all* the designs together; when, I doubt not, the correctness of the decision of the commissioners will be as evident as their high personal honour and integrity are universally known and acknowledged to be. — *One of the Ninety-three.*"

The following are extracts from the report of a discussion of the subject of the New Houses of Parliament which took place in the House of Commons on February 17., as given in the *Morning Chronicle* of February 18.: —

Mr. Hawes rose to move, that it be an instruction to the committee appointed to consider and report on the plans for the two Houses of Parliament, to inspect all the plans which had been submitted to His Majesty's commissioners, &c., and to receive the estimates of the said plans from such architects as might be willing to furnish them to the committee. By making this motion, he did not intend to cast any reflection, directly or indirectly, on the commissioners; but he deemed the inspection of all the plans necessary, in order to convince the public, that, in selecting a plan for a building adequate to the purposes of the legislature, the decision come to was right and proper. It would give the public greater confidence in that decision. The course he was anxious to pursue would by no means open up the whole question again, which he particularly wished to avoid.

The *Chancellor of the Exchequer*, after stating the course that had been taken (and which has been repeated two or three times already during the present session) by the House of Commons in relation to these plans, declared it to be his opinion, that, if the motion of the Honourable Gentlemen were adopted, it would, in point of fact, be opening the whole case afresh. Of course, the committee would avail themselves of the opportunity of inspecting the whole ninety-seven plans that had been sent in to the commissioners; but if the House were, by special instructions, to impose upon the committee the duty to inspect all those plans, it would subject them to the greatest difficulty and embarrassment.

[The desire which the Chancellor of the Exchequer on this occasion, and

when Mr. Hume proposed to reconsider the subject of the site, does little credit to either his taste or his judgment; though, we admit, it is favourable to the despatch of business. The Right Honourable Gentleman, in reply to Mr. Hume, could only taunt him with having been one of those who agreed to the present site last session; adding, that he supposed that Mr. Hume, like others of his countrymen, was blessed with second site (sight); a sorry pun, unworthy of the subject and the place where it was uttered.]

Sir Robert Peel asked the Chancellor of the Exchequer whether, when parties were invited to send in plans for the New Houses of Parliament, there was any public notice given of any limitation of the expense? For instance, were the persons invited to send in plans upon the assumption that Parliament would vote 500,000*l.*, or any other given sum, for the purpose of constructing the New Houses of Parliament? If not, and if the matter of expense were left a perfectly indefinite question, he was not at all surprised that one plan might obtain great preference over every other plan, although, under other circumstances, it might not be entitled to that preference. An artist might have sent in a plan, drawn on the assumption that one million would be expended on the new buildings, and upon that assumption he might obtain a great advantage over a more penurious artist, who assumed that not more than 300,000*l.* would be voted. Although, therefore, an artist might be entitled to the reward granted by Parliament, if that reward were given to the best plan, without reference to expense, yet another artist, who combined the two considerations of a good plan and an economical expenditure of the public money, might possibly, on those two combined considerations, be entitled to a preference. He therefore wished to know whether the parties invited to send in plans had any instructions with respect to the expense which Parliament might possibly sanction?

The *Chancellor of the Exchequer* said that the whole proceeding respecting the New Houses of Parliament had been the proceeding of the House of Commons, and that the course adopted by the government respecting the plans had been controlled by the resolutions of a committee up stairs. No limitation whatsoever with respect to expense was contained in those resolutions: the principal object was to get the best plan that could be obtained of a building for the accommodation of the legislature, and the artists were left entirely free as to the article of expense, no restriction being imposed on them, except as to the style of building. As no limitation of expense was imposed, of course all the architects were upon equal terms, except so far as one architect might let his imagination lead him very wide with regard to expense and decoration, while another might be more moderate in his conceptions.

Sir Robert Peel. Another particular practical question which he wished to ask was, upon what principle the commissioners, appointed by government to make the selection of the plans, had awarded the prizes? Was their decision made upon the mere abstract consideration that those were the best plans that were the most beautiful and that were calculated to afford the most accommodation; or did they also take into account what the expense of the erection might be?

The *Chancellor of the Exchequer.* No, no!

Sir Robert Peel. Then, really, the commissioners had gone upon a plan that might very easily give one man's plan a preference over another, which, if practically considered, would not be entitled to that preference; for if an artist sent in a plan upon the assumption that five millions would be expended on the building, he must have a decided advantage over others whose assumptions were not so extravagant. [Sir Robert Peel has here touched on a most important point, which, if followed out, would to a certainty overset the decision of the commissioners. We know one architect who gave in a design, and one of a very superior description, which we shall point out afterwards, who, in many of the details, was guided, in a great measure, by what he thought would be considered moderate in regard to expense.]

The *Chancellor of the Exchequer.* The only things the commissioners could take into account were the beauty and the convenience of the plans; because

the matter of expense never could be brought before them at all. They had only to decide on which was the best plan.

Mr. Hume said that the Right Honourable Baronet was quite correct in the view he took as to the proceedings of the artists. He was sorry that, in the course of their proceedings, they had made one or two serious errors. In the first place, they had made a grievous error in allowing commissioners to be appointed at all until the plans were given in; because he was informed (he might be misinformed) that some of those very gentlemen (although the Chancellor of the Exchequer had said that it could not be) had seen some of the plans before they were submitted to their selection as commissioners. He had been told that some of the plans were exhibited to a great many individuals, among whom were the commissioners themselves, by the architects, before they were sent in; and, as those commissioners were accustomed to see architectural drawings, it was quite impossible that it should be otherwise. Indeed, he had been informed that the successful candidate, Mr. Barry, had exhibited his plan before it was sent in. He (Mr. Hume) had not seen it; but it was said that the commissioners had inspected the very plan that had been selected as the best out of court. That was one mistake. The next was with regard to the expense. He could only say on his own behalf, that it was not his fault, for he had suggested that a limitation of the expense should be a part of the recommendation of the committee. He regretted that the House had not allowed the exhibition of all the plans sent in (both those which had been accepted, and those which had been rejected) together, in order that the public might have an opportunity of contrasting them, and forming a fair and competent opinion on the subject. [Mr. Hume, we think, should have here noticed a third grievous error, more grievous than all the others, and respecting which he made his motion some days before; viz. the not allowing the architects to choose their own site for the design, or not fixing on some other site than that of the old Houses. With respect to the subject of the plans having been seen by the commissioners, we have no doubt some of them were, and we believe, among others, that of Mr. Barry, for which we attach no blame to that gentleman, who, in common with all the other architects, had a right to exhibit his plans, if he thought proper, to all the world. That most of the competing architects did exhibit their plans to their friends, we believe, is generally known. We saw some, and we know one gentleman who saw seven or eight, and described the leading features of each. The magnificence of Mr. Barry's design, and the grandeur of his idea of a central tower as a royal entrance, were matters of conversation, among those interested in the subject, for weeks before it was announced that he had obtained the prize. We mention these things solely to show the wretchedness of the present system of competition, and in the sincere hope that, by aiding to expose it, we may be instrumental in leading to something better.]

The *Chancellor of the Exchequer* begged to express his most entire and unqualified belief that there had been no communication between the commissioners and the architects, and that no plan had been submitted to their inspection until the proper period arrived (hear, hear!). So little was known on the subject to the candidates, that one of the preferred parties [Mr. Railton] had even taken steps in conjunction with one of the disappointed architects to exhibit his plan with others that had been rejected, when, to his surprise and delight, he found that his design had been approved of. [This is no proof whatever that the commissioners had not seen some of the plans. From the very first offer of the premiums, it was intended by several architects to propose the exhibition of those plans which were unsuccessful; a fact which is generally known. If the Chancellor of the Exchequer wishes to convince the public that none of the plans were seen by the commissioners, he has only to get the commissioners individually to make a declaration to that effect.]

Mr. Warburton thought there could not be a greater absurdity than to require an estimate from different architects, inasmuch as the opinions of

different individuals about even the cost and value of the materials varied considerably.

Sir Robert Inglis expressed his belief that the committee had not the power either of requiring estimates from the different architects who had sent in plans, or of limiting them to any particular expense.

Sir Frederick Trench was certain immense difficulties would have been avoided if a *maximum* of expense had been fixed. He had no doubt that the best plans had been selected, but he had as little doubt that to carry out and complete any one of them would cost two millions of money (hear, hear!). After all, none of the plans which had been selected by the committee might be approved of by Parliament, and then the House would have to begin afresh. [We sincerely hope it may, and that the subject of the site may be reconsidered.] The whole of the plans sent in were about to be exhibited; and, if any honourable member saw one which he considered to possess greater merit than any of the four selected by the committee, he would have an opportunity of stating his opinion to the House. [It may seem a truism here to observe, that in architecture and engineering the merit of all plans is relatively to the expense. In the works of the first French and English authors on this subject; for example, in the *Leçons, &c.* of Durand, and in the *Letters*, &c. of Woods, the problem to be solved by the architect is stated to be, "how, in the given locality, with the given materials, and expense, to produce the required accommodation and effect."]

Mr. Hughes Hughes begged to state to the House a fact which would, perhaps, tend to show that the expense need not be so great as some honourable members had anticipated. It was this: one architect, who sent in a design, was told that it would be impossible to erect so magnificent a structure as he proposed, unless at an enormous expense. His reply was, "It might be well done for 500,000*l.*"

Mr. Charles Wynn did not imagine that the establishment of a *maximum* of expense would have been attended with any great benefit. It was very easy to fix a *maximum*, but how was it to be enforced? It was impossible that any architect could give security that his original estimate of 300,000*l.* should not ultimately be nearer 500,000*l.* or 600,000*l.* [To fix the *precise* expense may be considered as impossible; and, indeed, it is difficult to arrive at any thing near the expense, in the case of buildings of such immense magnitude, and so different in their plan from those of ordinary execution; nevertheless, there is a wonderful difference between an imperfect estimate, and proceeding at random. We will venture to assert, that, if the plans were properly drawn out in all their details, and competent surveyors employed to estimate the expense of executing them, the amount given in by these different surveyors would not differ more than 10 per cent.; nor, were they to be executed, would the difference be greater in the general amount, provided no material alteration were made in the plan, and no rise took place in the price of materials.]

Lord Stanley was very desirous to correct an erroneous impression which had gone abroad relative to the award of the commissioners. He had seen it very generally stated that they had awarded 1,500*l.* to the gentleman who had sent in the first plan, and 500*l.* to each of the other architects whose designs they approved of. Now, unless he was much mistaken, they had no power to make any such award. All they had to do was this: to select a number of plans, not less than three, nor more than five, to be referred to a committee to be appointed subsequently, composed of members of both Houses of Parliament; and to declare each of these plans entitled to a premium of 500*l.* A further recommendation of the committee was, that the architect of the plan ultimately selected, if he were not employed to build the Houses of Parliament, should receive a further premium of 1,000*l.*

The *Chancellor of the Exchequer* admitted the accuracy of his noble friend's recollection of the extent of the powers intrusted to the committee.

Mr. Smith O'Brien trusted that the gentlemen who had devoted their time

and talents to this very important service would receive adequate remuneration (hear!).

Mr. Hawes replied, and said he would leave the case for the decision of the House.

Lord Sandon observed, that it had been hardly ever found, in any case, that an architect was enabled to give in a correct estimate of the probable expense of a building, until it was actually erected. He hoped the principle of the resolution which had been moved by the honourable member for Southwark would be recognised and adopted by the House. [Mr. Hawes's motion was, however, negatived by a majority of 72; there being only 168 members in the House. We hope that the matter will be reconsidered, not only once, but several times; for there is yet evidently great ignorance and uncertainty in the House, as well as among the public at large, on the subject; and, in a matter of so much importance, it is alike due to the public, the Parliament, and the architects, to have every thing as clearly and as fully explained as possible.]

A new Site for the Houses of Parliament. — Since sending Art II. to the printer, we have mentioned to an eminent architect our idea of a new site, which should admit, at any future time, of surrounding the Houses of Parliament with all, or any number, of the government offices. We have also mentioned the subject to another gentleman in a government office, who has given us a list of the government offices below. The architect observed that the same extent of ground which it is proposed to occupy with the new government offices at Westminster would about cover the area within the railings of Leicester Square. He also mentioned that the area of Marlborough House and gardens would more than contain the New Houses of Parliament; but that to surround these houses with all the government offices in concentric quadrangles, with their diagonals north and south, would require the area (if the site of Marlborough House were chosen) to extend into the Green Park within a hundred yards of the water. Any person may satisfy himself on these heads by consulting the map of London. Should any young architect be disposed to exercise his ingenuity by devising a plan suitable for the whole, on the sites pointed out, or on any other, we shall be happy to publish it, if we should think it well arranged. We shall be equally happy to publish objections to the plan we have proposed.

List of the principal Government Offices.

Admiralty.
Army Department.
Army Pay Office.
Auditors of Public Accounts.
Board of Control.
Board of Ordnance.
Board of Trade and Plantations.
Courts of Law; including Court of Chancery, Court of Exchequer, Court of King's Bench, and Court of Common Pleas; &c.
Exchequer Office of Pleas.
King's Exchequer.
Lord Chamberlain's Office.
Office of Woods and Forests.
Board of Ordnance.
Parliament Offices.
Secretary of State's Offices; viz. —
The Home,
Foreign,
Colonial,
Irish, &c.
War Office.
Treasury.
Stamps and Taxes, &c.

Art. IV. *Dividend Pay and Warrant Office, Bank of England.* By D. S.

Some time back, a correspondent expressed a wish for an account of this new office in the Bank; and, by the kindness of the proprietor of the *Companion to the Almanack* (a publication which, we ought to observe, contains in each volume much information relative to the principal architectural improvements carried on in the metropolis during the respective years of its publication), we are now enabled to introduce a view of the apartment (*fig.* 20.), and consequently to describe it more satisfactorily than we otherwise could do.

This office, which is situated immediately behind the colonnade of the west wing of the south front, and forms one side of what is called the Garden Court, occupies a space of 94 ft. by 42. ft. Below, it is divided longitudinally into three equal aisles, by two ranges of coupled Corinthian columns, forming six spacious inter-

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columns on each side; and, whatever may be alleged in general against the practice of coupling columns, this instance may be taken as a judicious exception, since such arrangement was obviously dictated by that of the Venetian windows towards the court, which previously existed. These also necessarily regulating the intervals between one pair of columns and another, rendered it indispensable to make them unusually wide in proportion to the diameter, or, rather, to the height of the columns; for, where columns are coupled, it is their united breadth which,

in some measure, governs that of the intercolumns. Yet, although these latter might be pronounced excessive, and so far faulty, were we to examine the colonnades by themselves, without reference to the other parts of the plan, when we perceive the motive for what has been done (the consistency and harmony arising from the intercolumns corresponding with the compartments formed by the windows, and the regular distribution of each side into six squares), both the eye and the judgment are reconciled to what, under other circumstances, might, not unjustly, be censured as a defect.

The centre pair of columns, on either side, is attached to a pier, between which and the wall is an open screen corresponding in its design with the Venetian windows; and, as will be seen by the view, the middle portion of the room is also partitioned off by a handsome bronze railing and double stove; the railing being made to slide into a groove between the two fire-places of the stove. The introduction of these open Venetian windows, and the stove, materially improves the perspective effect by the variety they occasion; and the former contribute also to the expression of strength.

The entablature is rather diminutive and plain for the order; at least, so it would appear, were it not for the deep and highly enriched cove which surmounts it, and which may fairly be considered as forming an aggregate portion of the order itself; as it naturally forms the architectural finish to it, and defines the lower from the upper part of the elevation. Besides what it contributes to the design by its enrichment, two pleasing results arise from the application of this cove: by its projection, it causes the upper part of the room to seem to expand, and to appear wider than it otherwise might do; and, in the next place, owing to its being entirely thrown into delicate half shadow, it serves to prevent a too great glare of light, while the contrast of tint gives additional brilliancy to the upper story.

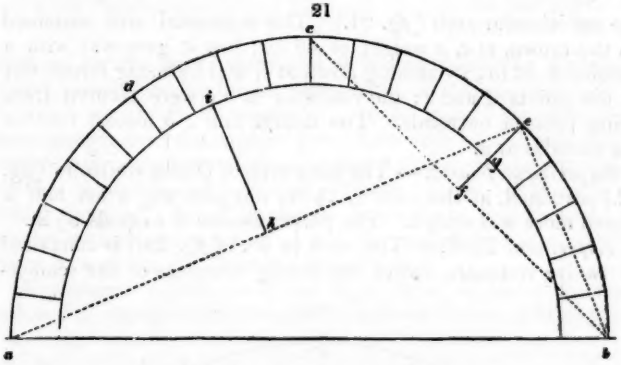
With the exception of the arches, the centre space of the room may be said to be entirely roofed in with glass, above which there is an external skylight; and the effect of light, increased, in some degree, by the narrowness of the space, and the consequently strong reflection from the wall on which it strikes to the opposite one, is not a little powerful. Here, then, we have a convincing proof, among many others, how highly advantageous this system of introducing the light is for public rooms, and, indeed, all where it is practicable, and where external view is not required. It strikes us, therefore, as rather extraordinary that it should not have been adopted in any of the recently built churches in the Grecian style, not only on account of its being so favourable to architectural effect within (admitting a full stream of central light, instead of scattered spots of it), but also

because it at once removes all occasion for windows in the external walls; which, owing to their number, if nothing else, always operate as blemishes; or, if even rendered tolerable, still are too repugnant to the idiom of the Greek style to be allowable, save through sheer necessity, where that style is otherwise affected to be rigidly adhered to. Another reason for admitting light from the top is, that when, as frequently happens, there are columns in front of the galleries, the effect of light received through the windows is reversed from what it ought to be; for, although the columns are by no means so closely spaced as to form anything like a screen, less light falls upon them, and is admitted into the body of the church, than falls upon the space behind the columns. Or, supposing light to be also admittted from an upper range of windows over the galleries, there is again this disadvantage, that, in such case, the light becomes too equally diffused throughout, to the utter extinction of shadow, and the loss of architectural repose.

It will be seen that the range of upper rooms (called the Accountant's Drawing Office) are continued quite round the interior, there being a window similar to the one shown in *fig.* 20. at the other end of the room. These windows, and those along the sides, intended not to admit light into this hall, but to receive it from it, certainly produce a character very unusual in internal architecture; one that is piquant as well as novel. Another circumstance that calls for some remark is, the uncommonness of the proportions. Those who are of opinion that the same proportions, and, so far as they are concerned, nearly the same effect, should uniformly be preserved, will probably object that the centre portion of this apartment is too narrow for its height, the latter being about three times its width (or equal to the entire width of the lower part, including the side divisions): yet, as narrow proportions and lofty proportions are equivalent in meaning, and loftiness is a quality in which even excess is hardly deemed a fault, we are far from being disposed to censure the design on such grounds; or, we should rather say, we like it all the better for the peculiar character it thus acquires, that character being, upon the whole, no less pleasing than it is striking and novel. Much liberality has been shown as regards the ornamental part of the architecture: the ceiling of the side divisions below are richly embellished, and there is also much decorative sculpture, consisting of a series of allegorical figures in bas relief, placed in the spandrels of the arches. Upon the whole, Mr. Cockerell, the present architect to the Bank, must be allowed to have here shown himself an able and worthy successor to Sir J. Soane; for what he has here done is one of the most original pieces of interior architecture to be met with in any of the public buildings of the metropolis.

ART. V. *Experimental Essays on the Principles of Construction in Arches, Piers, Buttresses, &c.* By WILLIAM BLAND, Esq., Jun.
Essay II. *Experiments, with Weights and Structures, on Arches of various Dimensions, composed of Wooden Voussoirs, and of Bricks, without Cement, but having the Aid of Friction, and immovable Buttresses at the Base, or Foundation.*

Experiment First. — THE scale proposed to be adopted for the diagram (*fig.* 21.) is an eighth of an inch to an inch. The semicircular arch (*a b c*) is 24 in. in span, and composed of twenty



wooden voussoirs; the dimensions of each of which are 4 in. long, 2½ in. wide, and 2 in. in average thickness; the weight of each is half a pound, so that the whole arch weighs ten pounds. Having placed this arch on a table, and secured the voussoirs *a* and *b* from being pressed out, a pound weight was put on the crown at *c*, which the arch supported; but, a quarter of a pound more being added, it gave way by sinking at *c*, and flying out at the points *d* and *e*, or between the fifth and sixth voussoirs from the foot and crown.

The dotted line *b c* is drawn straight from the crown of the arch (*c*) to the outside of the lowest voussoir (*b*); and the line *f g*, which is drawn perpendicular to *b c*, denotes the farthest point *f*, from the intrados at *g*, and which is, in this instance, 1¾ in.

Experiment Second. — The same arch (*fig.* 21.), at the point *e*, carried 4 lb., but it gave way when half a pound more was added. The dotted line *e b* lies within the voussoirs; but the dotted line *a e*, at the point *h*, equals 6½ in. from the intrados of this arch at *i*.

Experiment Third. — The arch (*a b c*) (*fig.* 22.) is composed of fifteen voussoirs, and is 22½ in. in span, being a segment of

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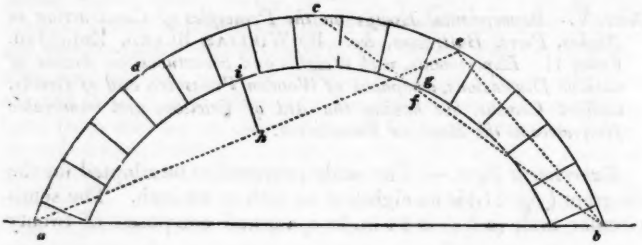

the semicircular arch (*fig.* 21.) This segmental arch sustained on the crown, at *c*, a weight of 42 lb.; but it gave way with a weight of 56 lb., by sinking down at *c*, and by being forced out at the points *d* and *e*; the voussoirs at *a b* were secured from being pressed outwards. The dotted line *c b* almost touches the intrades at *g*.

Experiment Fourth. — The same arch of fifteen voussoirs (*fig.* 22.) sustained, at the point *e*, 3½ lb., but gave way when half a pound more was added. The perpendicular *h i* equals 3½ in.

Experiment Fifth. — The arch (*a b c*) (*fig.* 23.) is composed of twelve voussoirs, out of the twenty voussoirs of the semicir-

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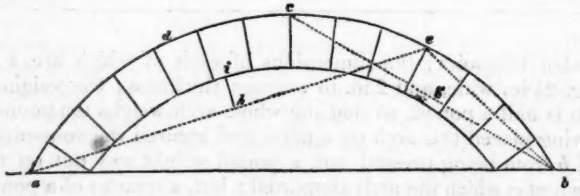

cular arch (*fig.* 21.), and is rather more than 19 in. in span. On the voussoirs at *a b* being made immovable, I placed my foot on the crown at *c*, and stood with my whole weight upon it (a weight equalling 147 lb.), and it supported me without yielding in the least degree. The dotted line *c b* lies, in this arch, quite within all the voussoirs. The line of the joint of the voussoirs, at *e*, is nearly at right angles to the line of force (*c b*); therefore, the weight has no tendency to displace or force those voussoirs upwards.

Experiment Sixth. — As this arch proved to be so very strong, I determined upon finding out its weakest parts; and, by trying different weights, I discovered them to be at the points *d* and *e*, just half way between the crown (*c*) and the base (*a b*). When the weight of 6 lb. was placed at *e*, the arch was balanced with

it; but, on attempting to add more, the arch sank at *e*, and was forced out at *d*. The straight line *h i* equals $1\frac{3}{4}$ in.

Experiment Seventh. — *Fig.* 24. is the same segment of an

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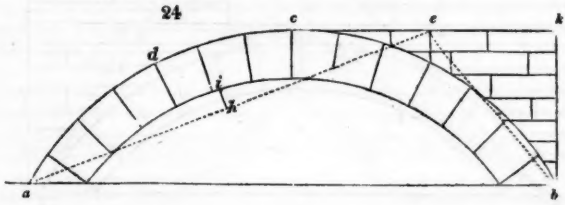

arch as *fig.* 23., being composed of twelve voussoirs. Between *c* and *b* some wooden bricks were placed, as represented by *c k b*, which were built up regularly. At the point *e*, which is perpendicularly over the weakest part of the arch on this side, some weights were placed, and the arch was found just to balance with 14 lb.: the brickwork consisted of fifteen wooden bricks, eight of which weighed 1 lb. The dotted line *e b*, in the diagram, is almost without the voussoirs; and the dotted line *a e*, at the point *h*, is about 1 in. from the intrados at *i*.

Experiment Eighth. — When both sides of the arch were bricked up as represented in *fig.* 25., and one course of brickwork

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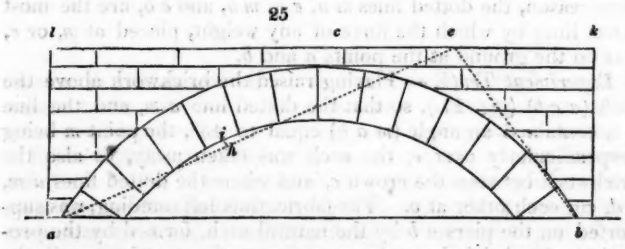

over the crown at *c*, this arch, of twelve voussoirs, just balanced with 21 lb., placed, as before, at *e*. The number of wooden bricks on each side of the arch was fifteen, and four on the top; making, in all, thirty-four, eight of which weighed 1 lb. The dotted line *a e*, at *h*, is only $\frac{3}{4}$ in. from the intrados at *i*.

Experiment Ninth. — The diagram (*fig.* 26.) had the brickwork raised three courses above the crown of the arch (*a b c*), which arch was also composed of twelve voussoirs. At the point *e*, 56 lb. were placed, which the arch firmly sustained; and, on raising the fabric two more courses, the arch, at the point *m*, carried my weight, or a weight of 147 lb. The dotted line *e a*, in the first case, just touches the intrados at *h*, so that the

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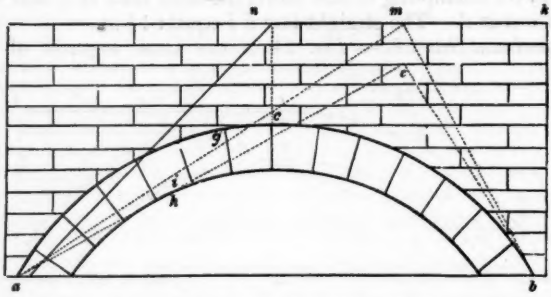
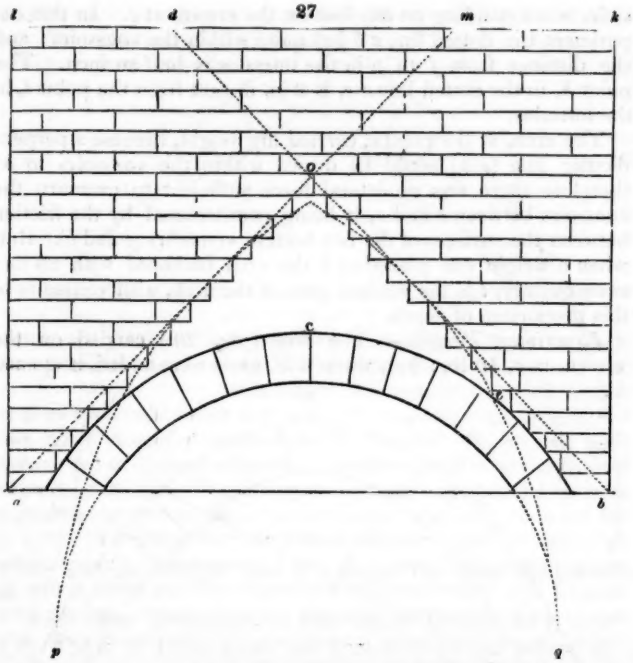


straight line *h i* vanishes. In the second instance, the dotted line *a g m* lies considerably within the voussoirs, similar to the dotted line *c g b*, in the fifth experiment.

Let a weight be placed at *n*, which is perpendicularly over *c*; then the straight line *n a* is the shortest, and most direct one from the weight itself, or from where it is placed, to the ground at *a*, by which it is ultimately supported. For, if it be not, let the force act from *n* to *c*, and from *c* to *a*; and we have then, in the figure *n c a*, a triangle, having the two sides, *n c*, and *c a*, less than the third side (*n a*), which is impossible; therefore the straight line *a n* is the shortest direction of the force. For the same reason, the dotted lines *m a*, *e a*, *m b*, and *e b*, are the most direct lines by which the force of any weight, placed at *m*, or *e*, acts on the ground at the points *a* and *b*.

Experiment Tenth. — Having raised the brickwork above the arch (*a c b*) (*fig.* 27.), so that the dotted line *a m*, and the line *a b*, contained an angle (*m a b*) equal to 45°, the point *m* being perpendicularly over *e*, the arch was taken away, as also the brickwork between the crown *c*, and where the dotted lines *a m*, *b d*, cut each other at *o*. The fabric, thus left standing, was supported on the piers *a b* by the natural arch, formed by the projection of a brick in each course over the opening, until the projecting bricks met at *o*.

This goes to verify the old adage, that, the more an arch is loaded by regular masonry, the more it will bear; but the truth is, as may be seen by this experiment, that the more it is loaded, the less it has to bear, since the maximum of the weight is limited at the intersection of the two dotted lines *a m* and *b d*; because the structure above these lines is then born by the piers (*a*, *b*) of the natural arch (*a o b*). The arch, therefore, in this instance, becomes a centring only, on which the superstructure is erected Whenever, then, a centring of this kind is required, on which to erect a high wall or building, as a tower, the Gothic form of an arch is the best, since it is of a form which coincides the



nearest to the natural arch (for any breach through a wall of masonry takes this form in the upper part of the opening); at the same time, it possesses a great degree of beauty and elegance.

From what has been before shown, the fabric without the arch will bear at the point *m*, which is perpendicularly over *e*, any weight, since the dotted line *m a* passes within the masonry; and, consequently, it will sustain any weight on any other part of the masonry, if the piers at *a* and *b* are kept in their places.

Experiment Eleventh. — The semicircular arch (*a b c*) (*fig.* 28.) is of 10 in. span, and is composed of nine wooden voussoirs. The dimensions of the voussoirs are the same as those used in the ten preceding experiments, and their average thickness is $2\frac{1}{2}$ in.; the weight of the whole arch is $4\frac{1}{2}$ lb.

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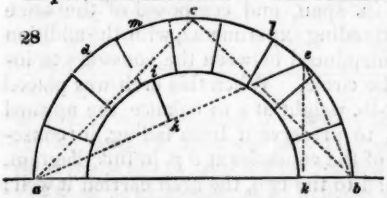

Having placed this arch on a table, and secured the bottom voussoirs at *a* and *b*, it then carried my weight as firmly as pos-

sible, when standing on one foot on the crown, at *c*. In this experiment the dotted line *c b* lies quite within the voussoirs; and the distance from *f* to *g* in the intrados is half an inch. The point *h*, in the dotted line *a e*, is 2 in. distant from the point *i*, in the intrados.

The arch, at the point *e*, carried my weight, because a perpendicular line (*e k*) could be drawn within the voussoirs to *b*; therefore there was no lateral force sufficient to overturn the voussoirs between *e* and *a*, it being counteracted by the friction between the surfaces of the two bottom voussoirs (*e* and *b*). But, when a weight was placed at *l*, the arch balanced with 28 lb.; consequently, *l* is the weakest part of the arch, with voussoirs of this proportion of depth.

Experiment Twelfth. — The arch (*fig.* 29.) carried on the crown, at *c*, 50 lb.; but, when 6 lb. more were added, it opened

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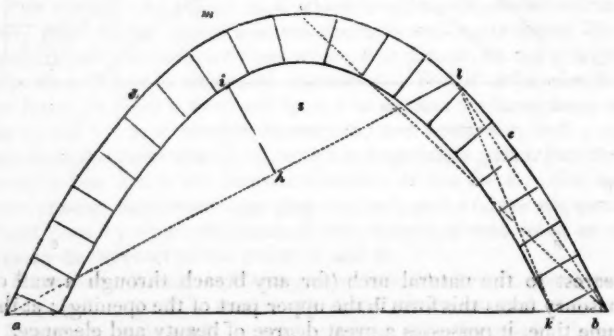

at *d* and *e*, and fell down. The arch is 24 in. in span, and the dimensions of the voussoirs are the same, as to weight, as in the preceding experiments. The arch carried 3 lb. at the point *l*, but gave way with 4 lb., by being forced out at *n*. The dotted lines *a*, *l*, at *h*, is 4½ in. from the intrados at *i*.

Experiment Thirteenth, on Pointed Gothic Arches. — The arch (*a c b*) (*fig.* 30.) is of 24 in. span, and composed of the same voussoirs as used in the preceding experiments, with the addition of a few wooden bricks, introduced between the voussoirs to increase the dimensions of the circle. When this arch was placed on a table, it required a 2-lb. weight at *c* to balance the upward pressure of the sides, and to preserve it from falling, in consequence of the shallowness of the voussoirs at *o p*, in this diagram. When 1 lb. more was added to the two, the arch carried it well; but, under the total weight of 4 lb., the arch gave way, by the crown sinking, and by the sides being forced out. The straight line *f g* equals 1½ in. At the point *l*, this arch would only carry

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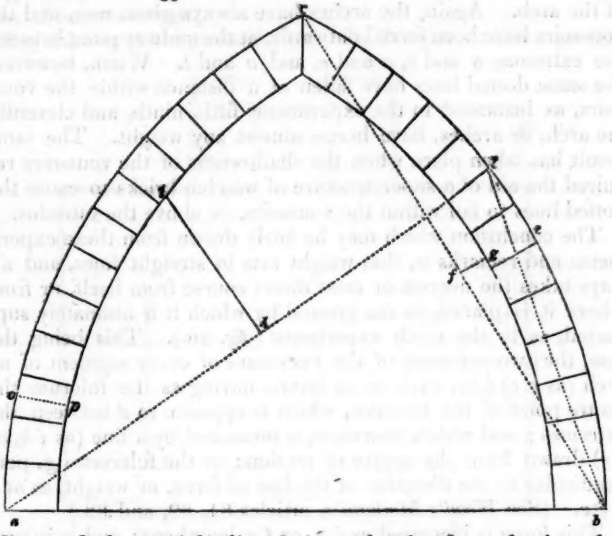
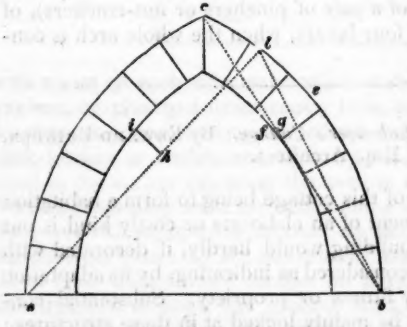


1 lb.; and the straight line *h i* equals 7 in. from the intrados at *i*.

Experiment Fourteenth. — The small Gothic arch *a b c* (*fig.* 31.) is of 12 in. span; and it carried, on the crown, at *c*, 14 lb. In this instance, the straight line *f g* nearly vanishes. At the point *l*, the arch carried 5 lb.; but it was forced out at *d*, on the addition of another pound. The line *h i* equals $2\frac{1}{2}$ in. in length.



Having submitted to experiment with weights the several preceding arches, it would now be well to take into consideration the effects consequent on the variations of the straight lines *f g* and *h i*, as derived from the dotted lines *a c*, *c b*, *a e*, and *a l*, in the different preceding figures.

Facts have shown, that, in proportion to the length of the straight lines *f g* and *h i*, so has the power of the arches decreased, or they are inversely to each other: meaning, that the greater the curvature between the two points *a c*, *c b*, *a e*, or *a l*,

or, the less the depth of the voussoirs *o p*, the less is the strength of the arch. Again, the arches have always given way, and the voussoirs have been forced outwards, at the midway point between the extremes *a* and *c*, *a* and *e*, and *a* and *l*. When, however, the same dotted lines have fallen at a distance within the voussoirs, as instanced in the experiments fifth, ninth, and eleventh, the arch, or arches, have borne almost any weight. The same result has taken place when the shallowness of the voussoirs required the aid of a superstructure of wooden bricks to cause the dotted lines to fall within the voussoirs, or above the intrados.

The conclusion which may be fairly drawn from these experiments and remarks is, that weight acts in straight lines, and always takes the nearest or most direct course from itself, or from where it is placed, to the ground by which it is ultimately supported, as in the ninth experiment (*fig.* 26.). This being the case, the two extremes of the curvature of every segment of an arch (as *a c*) (*fig.* 21.), act as levers, having as the fulcrum the centre point of the intrados, which is opposite to *d* between the extremes; and which, therefore, is measured by a line (as *i h*, or *g f*) drawn from the centre of motion; or the fulcrum *i g*, perpendicular to the direction of the line of force, or weight, as at *a c*, &c. (See *Wood's Mechanics*, articles 81, 82, and 83.)

This force is increased as *i h*, or *f g*, lengthens; and is in proportion to the approximation of the two extreme points *a* and *c*, &c.; consequently, when an arch once begins to give way, its destruction becomes inevitable, being expedited and made certain by the continued increasing length and power of these two levers (like the handles of a pair of pinchers or nut-crackers), of half the arch, or of the four levers, when the whole arch is considered.

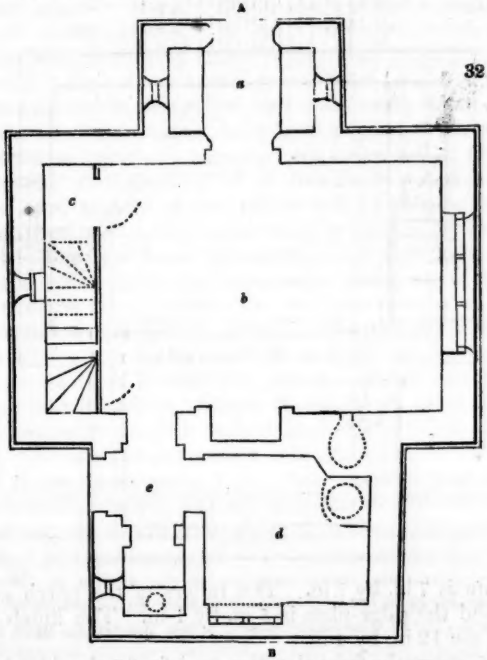
ART. VI. *Design for a Labourer's Cottage.* By EDWARD BRIGDEN, Esq., Architect.

THE proposed object of this cottage being to form a habitation for a labourer, all ornament of an elaborate or costly kind is out of character; and the building would hardly, if decorated with gewgaws and finery, be considered as indicating, by its adaptation to the end in view, any fitness or propriety. Substantial convenience is what should be mainly looked at in these structures: they should be as commodious as the nature of the case allows; and any little comfort which the labourer might highly value, yet which would be of but small cost, should never be grudged.

In this design, a wooden floor is introduced in the living-room (instead of stone), as one of the many means of assisting, in some degree, to render more comfortable the home, and thus to add

to the happiness, of some of the lowlier and more neglected portions of human beings.

Fig. 32. shows the ground plan. In this plan, *a* is the porch,



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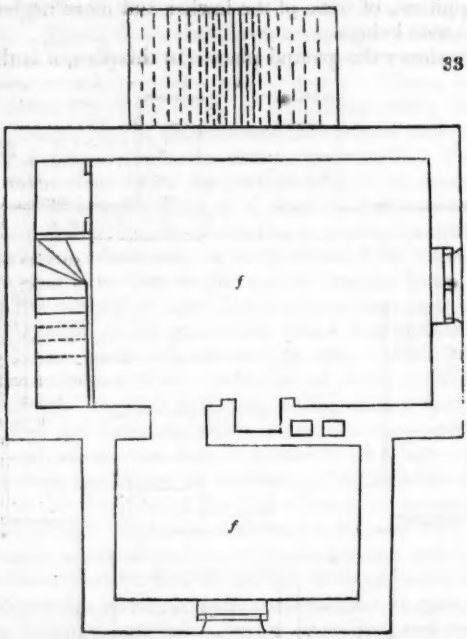
with a seat on each side, and a window above each seat; *b* is the kitchen, or principal living-room, 17 ft. by 12 ft., fitted up with an oven, &c., and having the closet *c* adjoining to it; *d* is the back-kitchen or washhouse, 7½ ft. by 8 ft., with a copper boiler fixed in the corner adjoining the oven in the other room, so that the same flue may serve for both; and *e* is a lobby leading into the yard, with an opening on one side into the privy. *Fig.* 33. is the chamber plan; *f f* are bed-rooms, the largest having a dark closet (*g*). *Fig.* 34. is a section on the line A B, in *fig.* 32. In this figure, *h h* shows the ground line; *i* is the porch; *k* the kitchen; *l* the back-kitchen; and *m*, *m* the two bed-rooms. The kitchen floor is formed of inch-boards laid on sleepers, 2 in. by 2 in., the sleepers being placed 5 ft. apart. The joists of the larger bed-room are 8 in. by 2 in., placed on wall-plates 5 in. by 2½ in. The joists of the smaller bed-room are 7 in. by 2 in., laid on wall-plates of the same dimensions. The tie-beams of the rafters are 5 in. by 1½ in.; the rafters are 4 in. by 2 in.; the

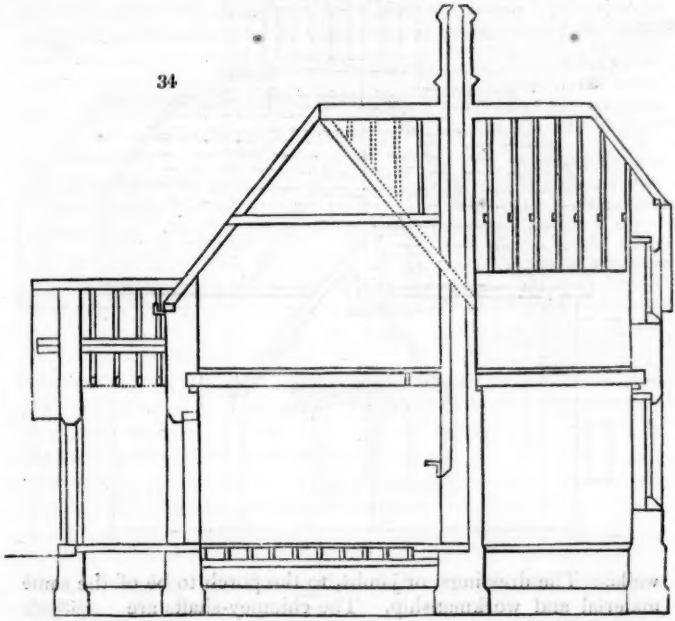


ridge-plate is 7 in. by 1 in. The rafters of the porch are 4 in. square, and the ridge-plate is 5 in. by 1 in. The lintels to the windows are 12 in. by 4 in.

Fig. 35. shows the front elevation, and *fig.* 36. the side elevation. *Fig.* 37. is the window of the living-room, drawn to a larger scale, showing the labels, mullions, &c.; and *fig.* 38. is a plan of the same window. The porch is made deep, and furnished with seats and windows, in order to serve, in some measure, for a summer room, in which the labourer's wife might sit at her work, &c.; or the labourer himself read in a summer's evening, after his day's work was done. Light is essential to health and cleanliness; and, therefore, the window of the living-room is made large. The closets are important for comfort and economy; and the flues are contrived so as to lose as little heat as possible.

SPECIFICATION.

Mason's Work. — The ground is to be excavated to the necessary depth for the walls, drains, cesspool, &c.; allowing, also, a space under the ground-floor joist of 12 in.: the spaces round the walls being filled in and rammed. The whole of the surplus matter is to be carted away.



The walls are to be well and soundly built of good flat-bedded Penant stone; having bond-stones introduced every 5 ft. apart; and the quoins hammer-dressed. The external fronts are to be faced with hammer-dressed Penant stone, laid in courses not exceeding 6 in. wide; and the joints to be neatly pointed with smith's coal-ash mortar. Dry bricks are to be introduced round the ends of all the joists.

The mortar is to be made of well-burnt stone lime, and clean sharp grit sand, or coal ashes, well mixed in proper proportions, and thoroughly tempered; no more mortar being made at one time, than will suffice for two days' use.

The plates, bonds, lintels, &c., are all to be bedded at their respective levels; the walls being leveled for the purpose. Door and window-frames are to be bedded, and pointed up the reveals. Grooves are to be cut, and holes made, where required. All apertures are to have rough brick, or stone, arches turned over them. Trimmer arches, of 4½ brickwork, are to be turned before the fire-places. Flues are to be carried up 12 by 9, properly parqueted, and afterwards cored. The plinth round the building is to be of Penant stone, scabbled, and properly bonded to the

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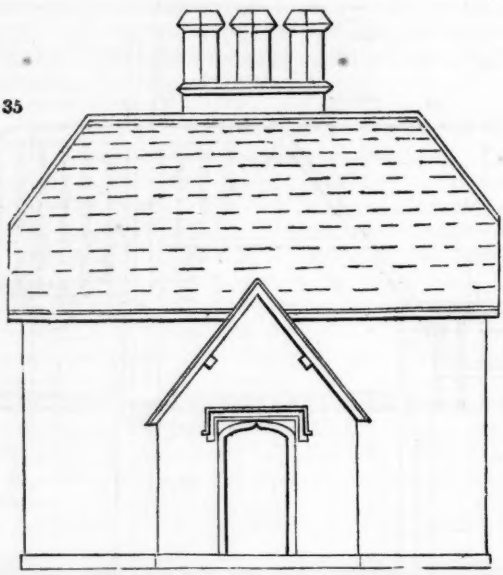

walls. The dressings, or jambs, to the porch to be of the same material and workmanship. The chimney-shafts are to be finished in the same manner as the face of the walls of the building. The external quoins of the windows and entrance-door are to be splayed, as shown in *fig.* 36., 6 in. by 6 in.

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The window-sills, window and door heads, and labels, and chimney caps, are to be of Bath freestone, properly worked and cleaned off; the door and window-heads being in one stone each. All the freestone to be used is to be protected, during the progress of the building by boarding, or other effectual substitutes.

The scullery, porch, and sheds on each side, are to be paved with scabbled Penant paving, laid in mortar, in a sound manner; no stone containing less than three superficial feet. The living-room fire-place is to have a Penant rubbed chimney-piece, with plain mantel-piece, jambs, coves, slips, shelf, &c. complete; with scabbled outer and inner hearths.

An economical kitchen-range, having a boiler, is to be provided, and fixed in this chimney-opening by the mason; it is to be properly fixed with fire-bricks and Stourbridge burr, with proper flue and damper. A Barnstaple oven is also to be provided, and fixed in this room, capable of baking 2 pecks of flower. It is to

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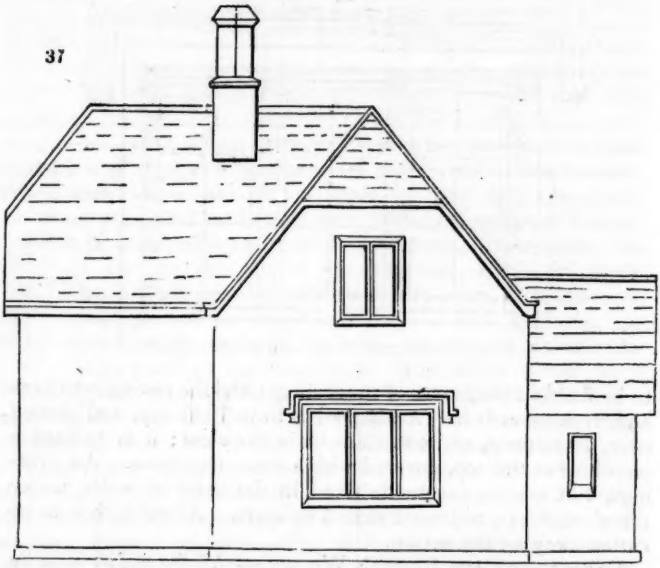

have a fire-place and flues gathered all round it, and issuing at the top.

In the scullery, an iron boiler is to be provided and fixed, 18 in. in diameter, with fire-place, door, furnace bars, and flue; it is to be properly walled round with brickwork; and the dressings to door and ash-pit are to be of freestone.

The bed-room chimney-piece is to be of freestone, worked plain, with jambs, mantel, slips, coves, &c. complete, having hard stone hearths. The mason is also to provide and fix a 20-in. low metal sham stove, complete. All the fire-work is to be set with Stourbridge clay.

The steps at the entrances are to be solid, square-nosed, and scabbled, of Penant stone. The external door-frames are to be provided with properly rebated hard stone plinths. Drains are to be made to convey away the waste and rain-water, and soil to the cesspool, formed, as shown in *fig.* 38., 9 in. wide; the sides being of stone walling, and the top and bottom of paving. The privy is to be trunked up with brickwork, having an iron trap set in cement. Traps are also to be introduced in the drains, where required. A sink stone, 2 ft. long, 1 ft. 3 in. wide, and 6 in. deep, is to be fixed in the scullery, on a brick stack; having a proper trunk to the drain, bell-trap, and grating. A grating and trap is

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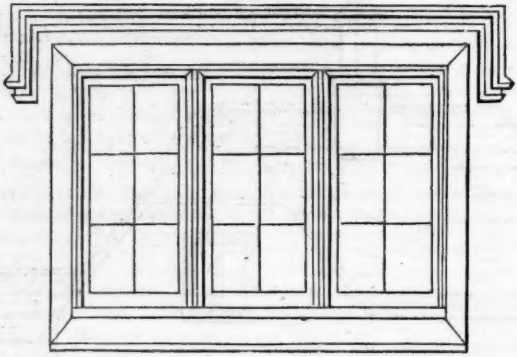

to be fixed in the centre of the scullery; and the paving is to have a current towards it. A cesspool is to be built dry, and domed over, 10 ft. deep, and 4 ft. diameter in the clear; it is to have a man-hole at the top, covered with a stout flag-stone. Air gratings, 4 in. square, are to be fixed in the external walls, under the wood floors, not more than 5 ft. apart. All rubbish is to be carted away by the mason.

CARPENTER'S AND JOINER'S WORKS. — All the timber is to be of the best quality, and of the description called batten; it is to be sound, free from sap and large and dead knots, and well seasoned. The deals are to be dry Christiana or Gaffelle. The several scantlings are figured on the drawings. The joists, rafters, plates, &c., are to hold their full thickness when fixed. The plates are to be due square, and well united at the angles; they are to be in long lengths, and properly scarped where required; blocks are to be worked in the walls for fixing the joinery work. The joists are to be cogged down to the plates, and well nailed. The roof is to be formed as shown: well framed, notched, cogged and scarped, and nailed where required. No joists, rafters, or ceiling joists are to exceed 13 in. apart from centre to centre. A row of herring-bone strainers, as shown in *fig.* 40., are to be fixed between the joists, over the living-room. The joists are to be properly trimmed before all fire-places. Arch centering is to be provided for the mason where required. The two external doorways are to have solid rebated and chamfered frames, 3 in. by 3 in., as shown in fig. 41., properly tenanted into the plinths by means of iron dugs; and well secured to the masonry by arms and wedges. The external doors are to be formed of 1¼ in. deal, beaded, ploughed and tongued together, having strong ledges, 1½ in. thick, and 9 in. wide; they are to be hung with

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18-in. cross-garnet hinges; and each door is to have two 6-in. barrel-bolts, and a good 8-in. stock-lock and Norfolk thumb-latch. The internal doors are to be ledged, of 1-in. deal, ploughed, tongued, and beaded; hung to 1½-in. rebated jamb linings, 6 in. wide, with 16-in. cross-garnet hinges, as shown in *fig.* 43. In this figure, *a* is the wall, and *b* the jamb lining. Each door is to have a thumb-latch. The window-openings are to have solid frames and mullions, as shown in *fig.* 44., 4 in. by 3 in. rebated and chamfered, firmly fixed to the stonework. The sill is to be of English oak, properly sunk and weathered. The sashes are to be formed of 1½-in. deal, moulded, and hung to the frames, each by two 3-in. butt-hinges. Each sash is to open, and to have a strong eye and hook to fasten it when closed, and also a stayhook and staple, to keep it open when required. Shutters are to be fixed to all the ground-floor windows, formed of 1¼-in. deal, clamped, and hung so as to fall back against the wall, by means of a rule joint; they are to be hung with 3-in. butts, and each is to have a spring-bar fastening. The floor of the living-room is to be laid with 1¼-in. deal; straight joints, and no board exceeding in width 7 in. The privy and bed-room floors are to be of 1-in. deal. Mitred margins are to be fixed round all the hearth-slabs. Staff-beads are to be fixed to all angles where required. The stairs are to be formed with 1-in. treads and risers with round nosings, supported on proper carriages, and having string-bound newels and deal rounded handrail. They are to be enclosed up to the ceiling of the chamber floor with braced boarding, 1 in. thick, properly ploughed, tongued, and beaded. The doors in the partition to be as before described, but hung to a rail fastened to the partition. Under the stairs, and in the front bed-room, are to be formed closets, having three shelves in each, the doors to which are to be 3 ft. wide, having good cupboard locks. Inch torus skirting, 7 in. high, is to be fixed to all the boarded apartments; and 1-in. window-boards are to be fixed to the windows on bearers. Seats are to be fixed in the porch, as shown, rounded on the edges, having strong uprights underneath, formed of 2-in. deal. Inch pipe-casing to be provided where required. A dresser is to be fixed in the living-room, 5 ft. long, extending the height of the room. It is to have a 2-in. dresser-top, 1 ft. 6 in. wide, with 3 drawers under, 6 in. deep; and over the top

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shelves are to be fixed, 9 in. wide, and 1 ft. 6 in. apart, properly beaded. The cheeks are to be 1½ in. thick. The privy is to be fitted up with 1-in. movable seat and riser; a proper hole to be cut, with turned cover, &c. A curb, and a ¾-in. cover to the boiler, with a strong handle, are to be provided, and the former fixed. Screws are to be used for the purpose of putting on all the locks, bolts, hinges, and other ironmongery.

PLUMBER'S WORK. — The valleys are to be laid with 6-lb. cast lead, 18 in. wide. Cast-iron shoots are to be fixed to the eaves, 3 in. wide; and three 3-in. pipes, to convey the rain-water into the drains. The whole is to be properly and securely fixed.

TILER'S WORK. — The roofs are to be covered with good picked stone tiles, laid on strong heart red deal battens, and they are to be well and properly pointed. The ridge is to be covered with a freestone creese.

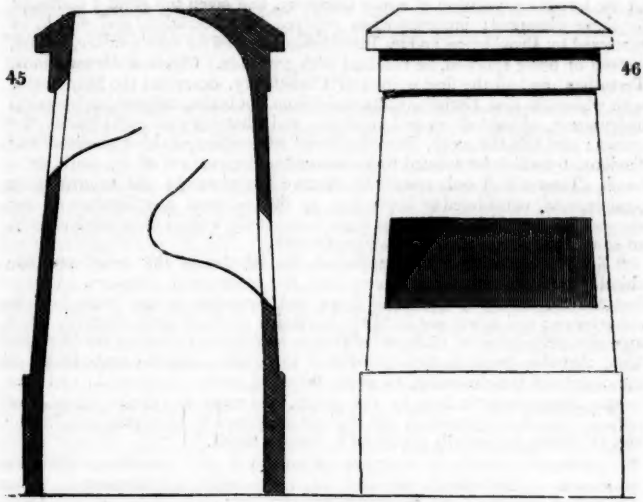
PLASTERER'S WORK. — The whole of the walls of the several apartments are to be plastered with a good coat of hair mortar, and set with fine stuff. The ceilings to be lathed, rendered, and set. The eaves to be plastered where necessary. The whole of the interior is to have two coats of white lime. Cement skirtings, 5 in. high, to be run in all those apartments which are to be paved.

GLAZIER'S WORK. — The sashes are to be glazed with second Nailsea crown glass, well puttied and secured.

PAINTER'S WORK. — The whole of the wood and ironwork usually painted is to have four coats of oil, and the best white lead, and to be finished in plain colours.

ART. VII. *How to cure a Smoky Chimney.* By WM. KENDALL, Esq.

How to cure a smoky chimney, being a question of so much importance, I presume any hint to forward the completion of so desirable an object will be acceptable to the readers of your Magazine. I accordingly send you the accompanying sketch (*fig.* 45. and 46.) of a chimney which I saw at Pool Park, the seat of Lord Bagot, in Denbighshire, some time ago. A reference to the section (*fig.* 45.) will at once explain the principle upon which it is intended to act: *a* is the flue; and *b*, *c*, and *d* are apertures left for the escape of both wind and smoke; as when the wind blows from either side, or directly downwards, it will, it is presumed, escape from the opposite aperture, and leave the third aperture for the escape of smoke. *Fig.* 46. is an elevation of the chimney, showing the aperture at *d*. When I left Pool Park, these chimney-tops had



not been fixed; and I have not since heard how they succeeded. They were of cast iron; but they are so simple in construction, that they might be made either of artificial stone, or Parker's cement, and formed to suit any architectural design.

Kineton, Warwickshire, Dec. 7. 1835.

REVIEWS.

ART. I. *An Historical Essay on Architecture.* By the late Thomas Hope. Illustrated from drawings made by him in Italy and Germany. Royal 8vo, 2d edition. London, 1835.

(*Continued from* p. 88.)

CHAP. XV. *Destruction of Pagan Works of Art, which took place in the Early Days of Christianity, and Progress of the Use of Mosaic and other gaudy Decorations.* When the Romans conquered Greece, only a few of the principal works of art, which were too ponderous to be removed, were left in their appropriate situations. Thousands of articles were carried to Rome, and thousands of statues, groups, quadrigas, and other articles of brass, not belonging positively to the altar or to the temple, were melted down, and converted into gold, by the tyrant Maximinian; and this work of destruction was completed, when Theodosius, by edict, ordered Pagan temples to be pulled down, and Pagan deities to be hurled from their pedestals.

"The Pagans had fallen into an excessive fondness for the pleasures of the present life, from their uncertainty of a future existence. To the first Christians, the certainty of that which the Pagans grieved to doubt, coming with

all the forcible impression of a new discovery, had given too great a contempt for these pleasures; innocent when enjoyed in moderation, and which, as bestowed by Providence, and by Providence intended for man's solace, should, instead of being spurned, be received with gratitude. Clemens Alexandrinus, Tertullian, and all the first writers of Christianity, described the holy horror with which the first Christians abstained from hot baths, delicate food, musical instruments, elegant altars and furniture, and whatever else could gratify the senses: and this the more, from the literal acceptation of those words of our Saviour, by which he seemed to announce the destruction of the world as at hand. Thence they only sought to deserve the rewards, and to avoid the punishments, considered as impending, by the constant mortification of the senses; and would have thought their time wholly wasted upon works of art, so soon to be involved in the universal wreck.

"Nor were, during a certain period, the labours of the pencil and the chisel more in request for religious than for ornamental purposes. In the first church, chiefly composed of Jews and Gnostics, images were held in abhorrence: and it was not until the beginning of the fourth century, when a greater proportion of idolaters of Greece and Rome embraced the Christian faith, that they began to feel the want of those more sensible embodyings of the objects of their worship, to which they had been accustomed; and that images arose, wrought first by the pencil, and next in relief. About that period, indeed, a likeness of our Saviour, supposed to be miraculous, led the way to others confessedly produced by human hands."

(*To be continued.*)

Art. II. *Literary Notices.*

A Practical View of the Improvements effected in the Warming and Ventilation of Buildings, by the Introduction of the System of Warm-water Circulation through 1-*in. Tubes*, invented by Mr. A. M. Perkins, is preparing for immediate publication. — The work will contain ten zinc plates, consisting of plans and sections of some of the numerous public and private buildings warmed on this system; showing, minutely, the construction and arrangement of the different furnaces, tubes, &c.; also, methods of effecting, by a simple arrangement of the tubes, the perfect ventilation of public and private buildings, more particularly the latter, in which they may be introduced. By Charles James Richardson, Architect.

Designs for the proposed New Houses of Parliament, consisting of four plans, four geometrical elevations, one longitudinal and two transverse sections, with two perspective views; reduced to half the size of the originals, submitted to the Committee of Taste, December 1. 1835; designed and drawn on stone, by Peter Thompson, carpenter and builder; is announced for publication.

MISCELLANEOUS INTELLIGENCE.

Art. I. *General Notices.*

Filters for purifying Water have lately been much improved by Mr. Paine, plumber and glazier, Islington; they are of different sizes, according to the quantity of water required. The price of a moderate-sized one, supplying between 70 and 80 gallons per day, would be 2*l.* 10*s.* The stone used is of a particular kind, and so porous as to admit of the water soaking through it, and leaving its impurities behind. — *Tyro. Wilmington Square.*

Slate is becoming daily more extensively into use: it is being employed for paving the area in front of the New National Gallery, and also for churchyard memorials, instead of stone. It appears, from a paper read at a recent meeting of the members of the Architectural Society, that a slab of Welch slate, 1 in. in thickness, is equal in strength to a piece of Yorkshire stone of 6 in., or of Caithness, or Valencia, stone of 2 in., in thickness. — *Id.*

Art. II. *Domestic Notices.*

ENGLAND.

Institute of British Architects.—At the meeting of this Society, February 15., P. Papworth, Esq. in the chair, various presents from foreign societies and others were laid on the table. The Secretary, Mr. Donaldson, read a paper, by Mr. Gregory of Woolwich, on the slate quarries of Wales, and one from Mr. Jenkins on the same subject. C. Fowler, Esq., then explained the construction of the roof used by him to cover the Hungerford Fish-market, which is entirely of metal; the framing being of cast iron, and the covering of zinc; between which, in order to prevent galvanic action, there are several coatings of tar. The cost of this roof was 706*l.* A letter was read from M. Vandayer, a member of the French Institute, by which it appeared that a competition among the architects of Paris, similar, except in the amount of the prizes, to that which has just taken place in England respecting the new Houses of Parliament, has lately occurred in France. The occasion was a monument to be erected to the memory of the distinguished General Foy, for which purpose a million of francs was subscribed in a remarkably short period. The way in which a decision was made, is as follows. The drawings and models were first publicly exhibited for a week, and criticisms were eagerly sought from the public journals; the names of the candidates, meanwhile, being sedulously concealed. A commission was then appointed, consisting of architects, painters, &c., members of the Academy; afterwards, a second, of artists, not members of the Academy; and, ultimately, a selection was made from military men, high in esteem. These last, however, honourably declining to vote upon a subject they had not studied, the choice was left to the first two bodies; who, having the public opinion to assist their judgment, speedily came to a decision, with which nearly every body appears satisfied. One advantage of this plan is, to neutralise the effect of competing architects showing their designs, before sending them in, to numerous friends, which, though all perfectly fair, yet, as these friends may sometimes be among the judges themselves, or have friends among the judges, enables the judges to recognise the plans of individuals, and, of course, to incur the hazard of being more or less prejudiced. In short, all competition whatever ought to be made in public; and the criticisms of the public journals, and of every one capable of forming an opinion, ought to be courted. Even when a church, a workhouse, an almshouse, or any public building whatever, is to be erected, this ought to be the case; and the present seems to be a very suitable time for architects to make an impression on the public in this matter, and to destroy for ever that system of privacy and favouritism, which has hitherto prevailed in this country, to the great discouragement of all men who depended for advancement in the world on merit alone.

Architectural Society. — The monthly evening meeting of this Society was held on January 12. A number of interesting works of art were laid on the tables; and, amongst others, Mr. Hakewill's Sketches, illustrative of his Tour in Italy. These drawings excited considerable interest; for several of them were of scenes in the vicinity of Rome, and were executed with great taste. There were also some highly-finished architectural drawings of churches, and other buildings intended for religious purposes, in the south of Germany. The chair was taken by W. B. Clarke, Esq., the President of the Society. Mr. J. Blyth read a paper on the duties, difficulties, and responsibilities of the architectural profession; in which he dwelt on the difficulties an architect has to contend with in providing for the accommodation of persons having various kinds of wants; and complained that great injustice was often done, on this account, to professional men. At the conclusion of the lecture, the Chairman announced that a number of presents had been made to the Society since the last meeting; and, amongst others, some designs for the Houses of Parliament

in the years 1737 and 1799, from Sir J. Soane; three engravings of Peterborough Cathedral, from G. Moore, Esq.; and the plan, section, and elevation of Waterloo Bridge, from H. W. Hasley, Esq. — *M. C.*

Society of Arts. — At the evening meeting on January 12., Mr. Brunel delivered a lecture on his new mode of building arches without centring. In proof of the perfect nature of the principle, he stated that the arches constructed under the Thames Tunnel had stood unimpaired; whilst, by the immense pressure of the water, the iron shield had been torn as if by the force of gunpowder. At the conclusion of the lecture, Mr. Ainger made some observations on his new mode of ventilating buildings, and particularly as applicable to the new Houses of Parliament, which he illustrated by a practical model. Instead of the ordinary mode of admitting the current of air from below, in his plan it is admitted from above; in its descent, causing the air, which has been contaminated by respiration, and which, consequently, contains large quantities of carbonic acid and other mephitic gases, to flow out from the lower part of the room. — *M. C.*

Falling of a Funnel Chimney at Rotherhithe. — On the 29th of January last, after a stormy night, a lofty chimney, which had been erected on the premises of Messrs. Christmas and Hart, cement manufacturers, and finished only two days before, fell with tremendous force, crushing the roof of one of the adjoining houses, and burying several of the labourers in the ruins. The chimney was built by Mr. Brigg, a builder whose experience and ability are held in general repute in the neighbourhood. The exact height of the chimney was 72 ft. 3 in.; and the foundation was built upon a base of concrete, covered by a flagstone 6 ft. square, and about 4 in. in thickness. In the opinion of those who have viewed the ruins, it is considered that the soil was unfit to bear so weighty a superstructure; being itself, naturally, of a soft description, and rendered further insecure by the intersection, in many adjacent parts, of wide drains, or common sewers. It is further alleged, that the base itself was not sufficiently broad; as the top of the chimney was 4 ft. in circumference, and, of course, tapered only 2 ft. from its base to its mouth. Those who witnessed the fall of the lofty column say, that it swayed over, in one complete mass, from the base to the apex; increasing in its fearful velocity as it descended, but remaining wholly unbroken till it was snapped asunder by the concussion with the roof of the house. In the language of an intelligent person who witnessed the calamity, the chimney fell like a lofty pine tree suddenly uplifted by an earthquake. The flagstone on which the foundation was built was tilted up on its end nearly perpendicularly; a circumstance that seems strongly to show that the soil had not sufficient solidity for so high and weighty a structure.

In the evidence given at the coroner's inquest on the body of a labourer who was killed by this accident, one of the witnesses gave it as his opinion that the concrete on which the flagstone was laid had been prevented from setting properly by the frost; while others attributed the accident to an excavation which had been made at the base of the chimney to carry off the waste: but all agreed as to the narrowness of the base, and the unsoundness of the ground. The circumstance ought to serve as a warning to builders, and others, not to trust too much either to the compactness of the building, or the foundation of concrete; for, in this case, the compactness of the building, and the excellence of the workmanship, were evinced by the manner in which the chimney held together in one mass till it struck the house; and it was proved in evidence, that the depth of the concrete was greater than on ordinary occasions. The number of funnel chimneys now erecting in different parts of the country, generally in crowded manufacturing towns, and the fearful consequences that must follow the fall of any one of them, render this a subject of the deepest importance. — *J. A. D. London, Feb.* 1836.

Buckingham Palace. — The following account of the present state of the interior of Buckingham Palace is abridged from the *Morning Chronicle*: —

"The entrance-hall is ascended by a flight of steps open on steps from

either of three sides, at the top of which are numerous marble pillars of the Corinthian order, the caps of which are or-moulu chased in the highest perfection. To the right of the entrance-hall is a sculptured chimneypiece of statuary marble, of exquisite workmanship, in the upper part of which is to be placed a large clock. Opposite to the front door, at the top of the steps, is the sculpture-gallery, which has been considerably improved by the present architect, Mr. Blore, by the introduction of more light. This floor, as well as that of the entrance-hall, is inlaid with variegated marble.

"From the centre of the gallery, and opposite to the entrance-door, is the principal entrance to the libraries, a suite of rooms right and left; the first library consisting of a large bay-window, which faces the grand terrace at the back of the building leading to the pleasure-grounds. Great improvements have been made in the terrace by the introduction of abundance of light to the lower offices, which were previously almost in darkness. This room and the adjoining one are fitted up with white and gold bookcases, the doors of brass, with trellis panels; the chimneypieces of massive Sienna marble, above which are glasses in carved and gilt frames, of plain design, but well adapted to the rooms, which are furnished with large and small chairs, tables, sofas, &c. At the extreme end of the libraries to the left is the private dining-room; the walls are painted a pale green colour; at each end are massive marble columns; and the ceiling is panelled on a large scale. The three windows facing the entrance are hung with fine crimson cloth curtains, with deep silk fringe, supported by brass poles. The dining-tables are extensive, and of beautifully figured mahogany, with mahogany chairs, stuffed backs, and seats of morocco. The four side-tables are on beautifully carved legs; the chimneypiece of Sienna marble; and the grates correspond with those in the library, which are most tastefully executed. Next to the extreme end of the libraries to the right, is a small ante-room, with one window, the fittings and furniture to correspond with the libraries. Next to this is the Queen's sitting-room, the cornice of which is a handsome design, consisting of foliage and flowers in bold relief; the wall covered with superb India paper, with gilt bamboo mouldings, executed by Messrs. Robson and Co.; the chimneypiece of statuary marble, richly sculptured; the grate and fender of modern and classical design; and beautifully finished large chimney-glass, with carved and gilt frames. The two windows have figured silk curtains and draperies, with white and gold carved cornices. The chairs and sofas are richly carved and gilt, and covered with silk needlework, which was executed by the late Duchess of York. On each side of the fireplace are placed two bookcases of ebony and buhl, enriched with or-moulu ornaments.

"The decorations of the Queen's waiting-room correspond with those of the last; but the furniture is more simple: this opens on the Queen's private staircase. All the doors of these rooms are of fine Spanish mahogany, and specimens of the best workmanship: the floors are of oak. Leaving the centre part of the building, and passing the bath, the next apartment is a spacious sitting-room, with two windows magnificently hung with crimson curtains and draperies, and ornamented with rich carved and gilt cornices, and a chimney-glass, with carved and gilt frame, and modern and neat furniture. Beyond this is the Queen's private entrance, which is a handsome specimen of architecture of a semicircular form, entirely composed of marble: next to which are a small waiting-room and sitting-room, neatly furnished, and a suite of bed and dressing-rooms, fitted up in good taste.

"On the left of the entrance-hall is a grand staircase, which is composed of statuary marble, from the first landing, branching right and left, and reaching the state apartments. The railing of this staircase is of a most chaste design of scroll foliage, executed in mosaic gold by Mr. Deville, with massive mahogany handrails. The four corners of the staircase are prepared to receive statues, above which is a frieze, consisting of figures in bold relief, the whole of which is lit by an extensive dome of richly cut glass of grand design of figures and foliage. From the centre is suspended a richly gilt chandelier.

From this you enter the grand room, which is small, but magnificent, the floor composed of East India satinwood, lit from the top with cut glass of rich design. You then enter the saloon, the walls of which are covered with green silk tabinet, interspersed with richly ornamented pilasters; the window-curtains of green and gold figured silk, with drapery and rich bullion fringe with carved and gilt cornices; the two chimneypieces of statuary marble, with female figures, terminating in foliage. In the centre of the frieze is a crown surmounted with a wreath. The grates and fenders, which are of superior manufacture, were supplied by Mr. Jeakes; the chimney-glasses are of very large dimensions, with very massive carved and gilt frames; the chairs and sofas are richly carved and gilt, and covered to correspond with the curtains; the tables are of ebony and gold, of new design, and beautifully finished. At each end of the room are two magnificent ebony cabinets, inlaid with precious stones, originally belonging to Carlton House. The ceiling of this room is ornamented in white and gold, from which are suspended three most costly lustres. The floor of the balcony, upon which the windows open, and which command a fine prospect through the triumphal arch down the avenue of trees in the park, is of marble, nearly 40 ft. square; but the light of the room is very much obstructed by the great projection of the portico. The next room is the throne-room, the ceiling of which is of the richest description; the cove is ornamented with shields, representing the quarters of the British arms, emblazoned. The frieze is composed of various subjects from English history in bold relief. The entrance to the recess intended for the throne consists of rich pilasters, supporting massive trusses, from the foliage of which start out female figures of exquisite design, supporting wreaths bearing a medallion, with the initials of George IV. The walls are covered with crimson silk tabinet, divided into compartments by richly ornamented pilasters, the whole of which, as well as the ceiling, is richly gilt. The doorway leading to the saloon is composed of statuary marble, of massive design, with ornamented cornice, bearing the bust of his present Majesty, and enriched with various trophies. The two chimneypieces are of statuary marble, the pilasters of which are beautifully sculptured in warlike trophies and frieze, representing two figures of Fame. The grates are enriched with fire-dogs, representing dragons of magnificent design and exquisite workmanship, and fenders and fire-irons to correspond. The chimney-glasses are of a large size, in massive carved and gilt frames, the centres of the frames of which represent a shield supporting a crown. These frames are a very fine specimen of modern art. The window cornices, which are carved and gilt, correspond with the glass frames; the curtains and draperies are of crimson silk velvet, English manufacture, lined with gold silk gimp, and deep fringe; the chairs, which are beautifully carved and gilt, are covered with crimson; the sofas, which are also carved and gilt, are likewise covered with crimson velvet. In the rear, intended for the throne, is placed a splendid buhl cabinet, inlaid with precious stones of large dimensions, supported by carved figures standing on a rich buhl plinth. The furniture in this room is chiefly of rich buhl-work. Opposite the windows, are two pair of folding doors leading to the picture-gallery, which is about 190 ft. in length, and about 40 ft. wide, lit from the top with cut glass; the walls are covered with drab flock paper; the doorways leading to the adjoining rooms are of massive and superior design, executed in marble, enriched with foliage vases, &c. There are five chimneypieces of statuary marble, supported by figures emblematical of the fine arts; the floor is of oak, ingeniously laid, representing various figures. This gallery is considered to be the finest in Europe.

"From the centre of the gallery a door opens into the bay-window drawing-room, occupying the centre of the building back and front, and directly over the bay-window library. It has a splendid dome, and a ceiling divided into lozenge panels, formed by circular lines, radiated from the centre, and which are enriched with the rose, thistle, and shamrock. At the four corners are the British arms emblazoned. At three sides of the room, above the cornice, are

groups of figures, enriched with foliage in very high relief; the cornice, which is particularly gorgeous, is supported by lapis lazuli columns with gilt Corinthian imitation caps. On each side of the room are two recesses, with semicircular tops, the backs of which are composed of looking-glass, round which is a light gold ornament. The two chimney-glasses are made to correspond; the chimneypieces are statuary marble, supported by sculptured female figures, from which is suspended a rich drapery. The frieze is decorated with shells and other ornaments; round the top of the shelf is a rich or-moulu gallery; the grates, fire-irons, and fenders are of rich design, executed in polished steel, and covered with gilt ornaments. The carved and gilt semicircular cornices for the five windows correspond with the tops of the glasses; the curtains and draperies are of crimson silk velvet, trimmed with gold-coloured silk gimp and fringe: in the centre of the bay-window stands a magnificent table, manufactured of china, on the top of which are represented the heads of the Cæsars, and various subjects relative to their history, formerly the property of Napoleon; on each side carved and gilt tripods and candelabra stand. In each recess are carved and gilt sofas, covered with crimson silk damask, and chairs to correspond. In the centre of this room is an Amboyna and gold loo-table of beautiful design and exquisite workmanship; and there are through the room smaller tables to correspond. The floor is composed of various inlaid fancy woods. From the centre of the dome is suspended a magnificent lustre. To the left of this is the south drawingroom, the ceiling of which is divided into compartments variously enriched; from this ceiling are suspended four magnificent lustres; at each end, above the cornice, are emblematical subjects beautifully sculptured, enriched with foliage; the cornice is gilt, as well as the ceiling, and is supported by numerous columns of large dimensions, with gilt Corinthian capitals; the walls are covered with rich gold and white silk damask, with carved and gilt border mouldings. Chimneypieces of statuary marble, beautifully enriched with foliage; on the top a large chimney-glass, with massive carved and gilt frame. The window cornices are made to correspond with the curtains and draperies of gold-coloured silk damask; the draperies are of an entirely new and tasteful design. Stoves, fire-irons, and fenders, furnished of a superior description. Very massive commodes, enriched with or-moulu buhl cabinets, fill the various recesses; the richly carved and gilt sofas and chairs are covered to correspond with the curtains; the loo and other tables exhibit the finest specimens of Amboyna wood, with carved and gilt pillars and feet; tripod and other stands, carved and gilt, are placed in various parts of the room. Next is the state dining-room, of very extensive dimensions; the ceiling richly ornamented in three compartments, from which hang three massive lustres; the walls are covered with brown and white figured silk damask; at the south end is a deep recess, in which is fixed a handsome mahogany sideboard, nearly 20 ft. in length, supported on four beautifully carved and bronzed sphynxes of exquisite workmanship; underneath are two mahogany cellarets; the opening of the recess is enriched with Sienna marble pilasters and statuary marble caps and bases. There are two statuary marble chimneypieces; frieze enriched with rose, thistle, and shamrock; the pilasters having deep panels, filled with bold sculptured emblematical figures; the grates, fire-irons, and fenders of suitable design. The door architraves are of statuary marble, with sunk panels filled with or-moulu, oak leaves, and acorns, the doors of which are of the finest Spanish mahogany, enriched with mosaic gold ornaments and mouldings, consisting of one principal panel of looking-glass, above which is an elaborately enriched panel, the centre of it representing a crown; the whole of the doors of the state apartments are of the same rich design, and beautifully manufactured; the sashes and window-shutters are of fine mahogany, enriched with mosaic gold mouldings; the window cornices, which are beautifully carved and gilt, are of an entirely new and grand design; the curtains and draperies are of rich crimson silk damask, trimmed with rich gimp and deep silk fringe: these, together with the window cornices, produce a grand effect. Over these three

windows are three other windows of a circular form, each composed of one piece of cut glass, bearing the initials W. R., and a crown surrounded with a laurel branch. The side-tables are on richly carved standards; the mahogany dining-tables are about 60 ft. long, of the finest species of wood, on carved legs; the mahogany chairs, of good design, are covered with crimson morocco; the floor is of oak, with rich scroll foliage border of variegated woods, presenting a fine specimen of flooring.

" On the right of the bow drawingroom, is the north drawingroom, the ceiling of which is more simple than that of the south, but beautifully enriched and gilt. From the ceiling are suspended three rich lustres; round the room, under the ceiling, is a rich frieze of figures in high relief; below this is a cornice corresponding with that of the south, supported by numerous pilasters; in the centre of the caps, which are of gold, is a crown in colours; the furnishing and decorations of this room are the same as those of the south drawingroom, with the exception of a second fire-place, over which is placed a superb mirror: the carpet of this, as well as the carpets of the whole of the state apartments, are of Axminster manufacture, supplied by Messrs. Bell and Watson. This room leads directly to the Queen's sitting-room, the ceiling of which is of three compartments. From the centre hangs a splendid lustre; the walls are covered with crimson flock paper, with an enriched gilt bordered moulding. Chimneypiece of statuary marble, the frieze of which is beautifully enriched with or-moulu, supported by handsome bronze figures. The grate, fender, and fire-irons are of the richest design and execution. Over this chimneypiece is a large glass, in a richly carved and gilt frame. The window cornices are made to correspond with curtains and draperies of gold and white silk damask, trimmed with rich gimp and silk fringe, the draperies being particularly magnificent. A pair of couches, and the chairs, are richly carved and gilt, and covered *en suite* with the curtains. The tables and cabinets are of rich buhl-work. Next to this is the Queen's dressing-room, the walls of which are covered with green flock paper. The window cornice is carved and gilt, and the curtains and draperies are decorated with deep silk fringe. The chimney-piece is of statuary marble, inlaid with Sienna. The chimney-glass is in a carved and gilt frame; a mahogany cabinet, beautifully enriched with or-moulu, of the finest specimen of manufacture. The furniture is principally of fine mahogany and buhl. Adjoining this is the state bed-room, the walls corresponding with the dressing-room, as are also the cornices and curtains. At the end of this room is a recess, in which is placed the state bed, of fine mahogany, surrounded with curtains on brass poles, commodes, and wardrobes of rich tortoiseshell, ebony, and brass buhl-work.

" Entering the north wing, it is necessary to cross a passage to the King's dressing-room and wardrobe, which are most elegantly fitted up with mahogany furniture. This room adjoins the Queen's wardrobe, which is a large room, beautifully situated, with one large bay window; the wardrobe, which is about 20 ft. in length, exhibits one of the very finest specimens of mahogany, design, and workmanship: the tables and chairs are of mahogany. The eight following rooms in this wing consist of sitting, bed, and dressing-rooms for ladies in waiting, handsomely furnished. These rooms, and the whole of the state apartments, libraries, also the private apartments of their Majesties, are entirely furnished by Messrs. Dowbiggin and Co., who have displayed great taste in style and execution.

" On the south end of the picture gallery is the south wing. A spacious waiting-room, in connexion with the state dining-room, is conveniently fitted up with mahogany cases and tables. Adjoining this is the armoury, a spacious octagon room, lit from the roof, and of beautiful architectural design. The two chimneypieces, of statuary marble, are richly sculptured in warlike trophies. The pilasters contain sculptured busts of George IV. Mahogany cases are fitted round to receive the grand collection of armoury originally in Carlton House. The remaining rooms in this wing are fitted up for domestic offices. The upper rooms, in the centre building and wings, are fitted up as bed-rooms for the domestics, in a most convenient manner.

"The state kitchen, on the basement floor, which is a spacious octagon room, situated under the armoury, is most conveniently fitted up with iron tables, plate-warmers, &c., which are to be heated by steam. The range and ovens are conveniently constructed."

Buckingham Palace. — The following opinion of the interior of this building is from the work of one of the most intelligent foreigners who has ever visited this country; viz. M. Von Raumer: — "June 20. Yesterday, in company with Mr. D., and several other persons, I visited Buckingham House, the King's new Palace, in St. James's Park. Many objections might be made to the external arrangement and proportion, though its extent, and the colonnade, gives it an air of grandeur. But what shall I say of the interior? I have never seen any thing that might be pronounced, in every respect, more of a total failure: in fact, it is said that the King, though immense sums have been expended, is so ill satisfied with it, that he has no mind to take up his residence in it when the unhappy edifice shall be finished; and the dislike appears to me to be very natural. I, myself, should not care to have a free residence in it; for I should vex myself all the day long at the fantastic mixture of every style of architecture and decorations; the absence of all pure taste; the total want of an eye for measure and proportion. Even the great entrance-hall does not answer its object, because the principal staircase is on one side, and an immense space, which has scarcely any light, seems to extend before you at the entrance, to no purpose whatever. The grand apartments on the principal story are adorned with pillars: but what kind of pillars are they? partly red, like raw sausages; partly blue, like blue starch; bad imitations of marble, of which there is none; standing upon blocks, such as art rejects, to support one hardly knows what. Then, in the next apartment, no pillars, but pilasters; these pilasters without base or capital; and those with a capital, and the basis foolishly cut away. In the same apartment, fragments of Egypt, Greece, Etruria, Rome, and the middle ages, all confusedly mingled together; the doors, windows, and chimneypieces in such incorrect proportions, that even the most unpractised eye must be offended. The spaces unskilfully divided, broken, insulated; the doors sometimes in the centre, sometimes in the corner; nay, in one room, there are three doors, differing in height and breadth; over the doors, in some apartments, bas-reliefs and sculptures, where pigmies and Brobdignagians pell mell together: people from two to six feet high line admirably together. The smaller figures, especially, have such miserable spider legs and arms, that one would fancy they had been starved in a time of scarcity, and were come to the King's Palace to fatten themselves. The picture gallery is highly spoken of: I allow it is large; and the Gothic branches depending from the half-vaulted ceilings make a certain impression. On the other hand, this imitation of Henry VII.'s Chapel is out of its place here. . . . . The doors and windows, again, are in no proper proportion to the whole; the immensely high wall cannot be hung with paintings; and the light, coming from above from two sides, is false, insufficient, and broken by the architectural decorations. Thus the palace stands, as a very *dear* proof that wealth, without knowledge of the art, and taste, cannot effect so much as moderate means, supported by sound judgment: a palace, according to Bentham's theory of art, in which the doctrine of beauty and taste is idle superstition, which vanishes before his test of utility. But of what use is this palace? The best thing would be, for Aladdin, with his magic lamp, to come and remove it into an African desert. Then travellers might go in pilgrimage to it, and learned men at home might puzzle their brains over their descriptions and drawings, wondering in what a curious state of civilisation and taste the unknown people, who built in such a style, must have lived; and how such deviations from all rule were to be explained! If these learned men entered into discussion on the subject, the nation would be, if not justified, at least excused, and its liberal grants of money be alleged in its favour; but the King, and, above all, the architect, would be justly condemned for the violation of all the rules of art and taste." (*Raumer's England, as quoted in the*

Athenæum, Feb. 13. 1836.) We are most happy to quote the above criticism from a foreign author, rather than from a British one; because such an opinion, from one among ourselves, would have been considered, by many persons, as made in the spirit of party. A German, however, is much more likely to be partial to English taste, than prejudiced against it. The truth is, that in this country such a feeling as that of taste for the fine arts exercising itself freely and on rational principles can hardly be said to exist. Precedent is every thing; and the most absurd combinations, or, at least, combinations which at a glance show an ignorance of fundamental principles, continually obtrude themselves on our view. To give a familiar instance, which every one can understand, in the palace referred to, and in many other buildings, while the columns have richly carved capitals, and the frieze is, perhaps, ornamented with bas-reliefs, all or some of the windows have not even architraves. This is bringing together the extreme of poverty and the extreme of richness; but it is the result of copying parts, without thinking of their combination as a whole. — *Cond.*

Holborn Level. — We noticed, in p. 40., our objections to the plan proposed for establishing a public company, having for its avowed object the remedying of this long-acknowledged evil. So absurd a plan as the one alluded to we thought had no chance of ever being carried into execution; and, therefore, we said but little respecting it. Finding, however, that a company has been formed, and that a bill is in progress in Parliament, we consider it our duty to repeat our reasons for considering the plan as altogether objectionable, on account of its imperfection, and as only partially remedying the evil. According to this plan, it is proposed to leave the hill exactly as it is, so that carriages of every kind, either going to Farringdon Street from Holborn or Skinner Street, or coming from Farringdon Street to either of these streets, will have the same descent or ascent as they have at present. In what, then, does the improvement consist? Simply in providing a level line for persons passing from Holborn to Newgate Street. Now, admitting that the greater number of stage coaches and other carriages do pass in this direction, yet it must be allowed that a very great number also pass through Holborn and Skinner Street to and from Farringdon Street, and Farringdon Market; and that this number will be greatly increased when the plan now in progress, of continuing Farringdon Street to the New Road, is carried into execution. As a proof that the projectors of the plan objected to think that a very considerable number of persons will still go up and down these hills, a principal part of the profits to be derived by the company is proposed to be obtained from the rent of shops and cellars under the viaduct! which shops and cellars can, of course, only be approached by the very hills, the inconvenience attending the ascent and descent of which the company is to be established to remedy! Why adopt a partial plan, and leave a portion of the public to suffer the inconveniences complained of, through future generations, when, by adopting the plan referred to (p. 40.), or some other of a similar nature, the principal feature of which consists in raising the north end of Farringdon Street and lowering the highest part of Holborn and Skinner Street, so as to reduce the hills to a slope of 1 in 36, by which all, whether inhabitants or passengers, would be equally benefited. We do hope that Parliament will pause before they pass a bill for any project of this kind which may be brought before them. We are, however, happy to see the subject agitated, hoping that some good plan will, at no very distant period, be fixed on and carried into effect; but, whatever it may be, we trust that, in designing it, the benefit of *all* will be taken into consideration, and not that of only a few. — *Cond.*

City of London School. — The first stone of this new school was laid by Lord Brougham, on the 21st of October last year, with the usual ceremony. The site of this new building is Honey Lane Market, in the rear of the houses facing Bow church; the school, which is to accommodate 400 scholars, is in the old English style of architecture, from the designs, and under the super-

intendence of Mr. J. B. Bunning, and is expected to cost 11,500*l.* — *Tyro. Wilmington Square.*

Marylebone Almshouses. — Several plans, specifications, &c., with estimates, have been gratuitously offered by architects for the erection of almshouses, for the aged and the unfortunate residing in the parish of Marylebone. A freehold piece of ground has been given by Colonel Eyre for the purpose, pleasantly situated on Primrose Hill. — *Id.*

A new Church is being erected in Vincent Square, Vauxhall Road. The dilapidated almshouses, now standing in York Street, are to be taken down, and rebuilt adjoining the new church. — *Id.*

A new Dissenters' Chapel, on the right-hand side of Barnsbury Street, Islington, has just been completed: the suitableness of the style of architecture I shall leave your readers to determine upon. The front, which is of brick, faces the north-east; on the ground story, in the centre, is a large circular-headed window; and on each side of it is a square cement entrance, projecting from the front. The entrances have a door in the centre, with two Grecian Doric pilasters on each side, finished with a regular entablature; on the sides is a return pilaster, with a small window. Over these entrances is a small semicircular window, with a reveal round the same. On the gallery story are three circular-headed windows; and over these is a triangular pediment, with a circular window in the centre. The cornices, blocking-courses, &c., which are continued round the south-east and south-west sides of the chapel, are in cement; on the south-east side are six unusually long circular-headed windows. Adjoining, at the back of the chapel, is a small building including the vestry, &c. The cost of this erection is 1500*l.* — *Id.*

A Scotch Chapel, in the Gothic, or pointed, style of architecture, facing Duncan Terrace, Islington, has recently been completed. — *Id.*

Islington New Literary and Scientific Institution. — A building is about to be erected near Islington New Church, consisting of a commodious theatre for the delivery of lectures; and a library, with reading and conversation rooms. The rooms the Society now occupy are only temporary, and are found too small, the present number of members being about 300. — *Id.*

Islington New Church. — (See Vol. II. p. 465.) The following list of the expenses for building, fitting up, &c., this church, may not be uninteresting to your professional readers: —

Mr. W. King, for building church, and enclosing church ground, per contract	£3112	17	3
Mr. C. Barry's commission	155	12	0
Law charges	53	9	0
Consecration expenses	30	17	4
Planting church-ground	16	0	0
Printing and books	38	7	0
	£3407	2	7

King William Street, Strand. — A fanciful pillar, executed in stone, supporting a large handsome lamp, has recently been erected in the centre of the crossway from the British Fire Office to the opposite corner of King William Street. Near to the pillar are two octangular granite posts, about 2 ft. 6 in. to 3 ft. in height, in two divisions, having a curb-stone against each, protecting them from the carriages. — *Id.*

New Goldsmiths' Hall. — Some ornamental lamp-posts have lately been put up in front of the new Goldsmiths' Hall. They are of cast iron, and mounted upon stone pedestals: they have fancy capitals, formed of small leaves, supporting a large lamp; the lower part of the shafts, resting upon the pedestals, have four bold curled leaves. It is singular to observe the effect produced by paying attention to those minor conveniencies in buildings which, not a very long time ago, were seldom, if ever, taken into consideration.

This is strikingly exemplified in this new building; in which attention has been paid by the architect (Philip Hardwick, Esq.) to the lamp-posts already mentioned; to the railing enclosing the Hall; and even to the scrapers. — *Id.*

The Blue-Coat School, or Christ's Hospital. — Some houses in Newgate Street, facing Warwick Lane, have recently been pulled down, throwing open the south front of this Hall, which was erected in 1826, from the designs of John Shaw, Esq., to all passengers of that popular thoroughfare. The opening is enclosed by a neat iron railing, with gates, which are set back a few feet from the line of the houses in the street. On each side of the entrance gates is a decorated pier, in which are introduced, with other ornaments, small models of the boys in their peculiar dresses. The house on the left-hand side of this opening is just completed, and displays an elegant specimen of the old English style as applied to street architecture: three houses, on the right-hand side, are now being taken down; and, when this is done, a corresponding building is to be there erected. — *Id.*

St. Thomas's Hospital. — Part of a new hospital, in the Grecian style of architecture, adjoining the present one, which is situated at the corner of Duke Street, Borough, and Wellington Street, London Bridge, is now being completed. — *Id.*

Licensed Victuallers' School. — The first stone of this building, which is to be erected from the designs, and under the superintendence, of Mr. Ross, architect, in Kennington Lane, by the Licensed Victuallers' Charity, was laid by Viscount Melbourne, on the 21st of January, with the usual ceremony. Messrs. Webb, builders, have engaged to perform the various works at the cost of 14,000*l.* — *Id.*

Cambridgeshire, Cambridge. — A new chapel is in contemplation, which is to be erected upon a piece of ground purchased for the purpose, and situated near the Willow Walk, leading to Barnwell. In the latter place, first-rate houses, of a very handsome description, have been lately completed; and, early in the spring, it is expected that many more will be built. — *Id.*

Herefordshire — Hereford. — The unsightly school, which so long disfigured Hereford Cathedral, and blocked up the cloisters, has been removed, principally through the exertions of the Dean; and the good taste of that gentleman is prompting him to a work that, from the hasty glance I took of it, is, I think, likely to be a great improvement. By removing the filling up of two arches behind the communion-table, a view will be laid open, from the choir, of one of the most beautiful windows in England, that is now seldom seen, as it is parted off from the rest of the building by a wall, and the enclosed space, being used as a library, is, of course, not generally open to the public. — *R. V. July* 27. 1835.

Hertfordshire. — Hatfield House. — Part of this venerable mansion, a generally acknowledged first-rate specimen of Elizabethan architecture, was destroyed by fire on the 27th of November last year; being, however, insured in the Sun Fire Office, to a large amount, it will be restored without much difficulty: this is to be performed by Messrs. Webb, builders to the fire office, at the cost of 15,000*l.* — *Tyro. Wilmington Square.*

Lancashire — Manchester.— Fall of the Wall banking the River Irwell. The Commissioners of Police at Manchester have, for the last two or three years, been applying the funds at their command to the opening of a magnificent thoroughfare from the Exchange in that town to the new road leading to Bury, Burnley, &c. To do this it was necessary to erect an immense stone wall on the banks of the river Irwell, the average height of which was to be 50 ft. About 120 yards of this had been completed some time, and the workmen were proceeding with the remainder (the height of the unfinished wall varying from 40 ft. to about 15 ft.), when it fell, in one mass, into the river Irwell; and the consequences were, the total destruction of the works on the opposite side of the river (which is 40 yards wide), belonging to Messrs. Collier and Co., at-

tended with the loss of life, and serious injury, to various individuals. The injury done to the buildings on the opposite side of the river may be thus philosophically accounted for, although neither a single brick nor a piece of stone, that formed part of the wall, could by any possibility have come in contact with them. A wall, 200 ft. long and 7 ft. thick, falling in one connected mass into the river, the amazing concussion of the air, and the force with which such an immense mass of materials drove both the air and the water against the opposite buildings, caused their destruction. The roof was not only torn off, but the buildings were literally thrown down; and, of course, all the machinery was destroyed. Various causes have been assigned for the falling of the wall. Some assert that the wall itself was too slender, and that it ought to have been at least 10 ft. thick, considering its altitude, to enable it to resist the great quantity of loose earth which had necessarily been put down at the back of it to complete the road. Others maintain, that the wall was abundantly strong, but that the foundations were insufficient; and, that these giving way, the wall, in a mass, necessarily gave way also. No blame attaches to the mason, who remonstrated strongly against so large a quantity of earth being placed at the back of the wall before it had properly set. — *S. T. Manchester, Feb.* 1. 1836.

Surrey. — Dorking Church. — The foundation-stone of a new church, erecting by subscription, was laid, in the first week of November last year, by the Bishop of Winchester. The tower of the old church has not been removed, but is to have the necessary alterations made to accord with the new nave, which is to cost 4000*l.*, using the old materials. — *Tyro. Wilmington Square.*

Brighton. — Within these few years the town of Brighton has been much enlarged: it was originally confined to the west cliff, but has now been extended to the east cliff, which is called Kemp Town. The principal feature in this new town is a large square, having three sides lined with very handsome first-rate houses; many of them are in an unfinished state, but will be shortly completed. On the ground story are well-proportioned columns, of the Ionic order, supporting an ambulatory, or walking, gallery, from which the inhabitants of each house have an extensive view of the sea, which lines the fourth side of the square, and is enclosed by an iron railing. — *Id.*

Wiltshire. — Trowbridge Chapel. — The Tabernacle Chapel, at Trowbridge, has been closed for the purpose of making extensive alterations to it: besides painting, &c., galleries have been added. The chapel was reopened on the 18th of November last year. — *Id.*

Worcestershire — Worcester. — Our Natural History Museum and County Courts proceed rapidly, and early in August the foundation of a new church is to be laid in the blockhouse. A cemetery is also talked of. — *R. V. Worcester, July* 27.

Malvern. — Your friend and correspondent, Mr. Varden, is about to build a number of new houses, or rather villas, in this beautiful village for Edward Foley, Esq., M. P. You, no doubt, know the village of Malvern, and the manner in which it stretches up the hill. The situation is one of the finest in the kingdom; but the modern villas built on it are by no means worthy of the site. I hope Mr. Varden will be more successful. The ground on which the new houses are to be built is considerably elevated, commanding extensive views: it slopes gently to the east, and is backed by a steep lofty range of hills, partly covered with houses, and partly in an uncultivated state. A new road is to be laid out; and it is to be placed so that there may be an ascent from it towards the houses, by which means their architectural importance will be increased. Many of them are to be occupied as lodging-houses; but they will require to have large and handsome rooms, commanding fine prospects, not only of the principal view, but of the road, as many who will be likely to occupy them will, no doubt, prefer seeing a few passengers to the finest view in the world; and, if they did not overlook a road, they would consider them dull. — *E. D. Malvern, Dec.* 1835.

Art. III. *Retrospective Criticism.*

Errata in Censor's Reply to Mr. Perkins. (p. 42.) — In p. 44., for "t" read "t'"; for "e", read "ϵ": line 17., for "expansion from", read "expression for"; line 22., for "surfaces", read "temperatures". P. 45., last line but one, for "running", read "necessary". P. 46., in the eighth column of the table line 1., for "0·9", read "·09"; line 16., for "straight tube 45", read "straight tube 70"; line 18., for "right-angled tube 70", read "right-angled tube 45"; line 22., for "approximation", read "approximations".

Mr. Coles's Remarks on G. B. W.'s original Design for a Roof. (p. 95.) — I hasten to reply to these remarks upon my original design for a roof. Mr. Coles commences by giving your readers the valuable information, that it is a "combination of what are technically called the king-post and queen-post trusses;" but it is not, he thinks, "the best that could be adopted." Taking for granted that I assert it to be so, which I never did, he proceeds to point out the impracticability of my truss, and, further, to show which is the "best that could be adopted;" viz. his own. His objection to my design is, that the king-post truss derives its whole support from the side or queen-post trusses. Now, I see no reason why the queens should not be the principal supports of the truss: indeed, it is what I intended in making the design; and I introduced the lower king-post truss for additional strength; but, were the span less, it might be dispensed with entirely. If Mr. Coles will turn to *Nicholson's Carpentry*, he will find that, in the truss of old Drury Lane Theatre, the construction of which is somewhat similar to his and mine, there was no king-post in the lower or principal division of the truss; but that a clear space of 32 ft. was obtained between the two queen-posts, which alone supported the upper beam, over which were three king-post trusses. Now, it is extremely probable that, had the queen-posts of this roof failed "in their destined purpose," the kings would, as Mr. Coles, with a happy mixture of sagacity and humour, observes, have been "humbled in the dust:" but they stood for several years; and, but for their unfortunate destruction by fire, would, in all probability, be standing now. In return for Mr. Coles's valuable information, I will communicate to him a secret of equal importance and truth. Were the key-stone to "fail in its destined purpose," the rest of the arch would meet with the same ignominious and terrible fate to which he dooms my king-posts; or, were a story-post, supporting a bressummer, to give way, it is not at all unreasonable to suppose that the latter would share its downfall. In fact, I might give him many pieces of practical information of this nature (as valuable and as sensible as his own); but, as he says respecting the timbers, "I presume I need not describe them, as they are so commonly understood." By the by, although the names of the timbers may be understood by inspecting his sketch, the scantlings cannot; and, as Mr. Coles furnishes neither figures nor scale, it is not quite easy to ascertain: nor am I at all disposed to take for granted the truth of his assertion, that "the weight, and, consequently, cost, of materials" in his truss is less than of those necessary for the construction of mine. Until he furnishes these very material particulars for a fair comparison between his design and mine, he must excuse my doubting whether, as his namesake at Charing Cross states, "*Coles's truss is best.*" — *G. B. W. London, February* 1. 1836.

G. B. W.'s Design for the Truss of a Roof of large Span. (Vol. II. p. 536.; and Vol. III. p. 95.) — It appears to me your correspondent G. B. W. is not fully acquainted with the construction of roofs on large spans, for the following reasons: first, the truss he has given is in two heights; therefore, the want of continuation in the principal rafters renders it weak and unfit to sustain the cross strains, occasioned by sudden gusts and currents, to which all roofs are frequently liable; and, secondly, the struts are by no means properly placed, so as to meet the pressure of the principal rafters, purlines, common rafters, and covering; and thirdly, the corbels are so placed as to afford but little

strength to the tie-beam end. The truss of Old Drury, mentioned by your correspondent, has no reference to the one he has given. The accompanying truss (*fig.* 47.) has been suggested by an experience of many years' practice; and it is so plain, I conceive, as to require but little explanation. The dimensions of the timbers are given below, and the weight the roof is calculated to sustain permanently. It will be seen, the tie-beam ends are secured into a cast-iron chair at each end, properly bolted thereto, and into the oak wall-plates by two shanks cast on each of them. I shall be most glad to learn, through the medium of your Magazine, any improvements that can be suggested, or of any defects it may have. — *Thos. Cook. Welford Place, Leicester, Jan.* 23. 1836.

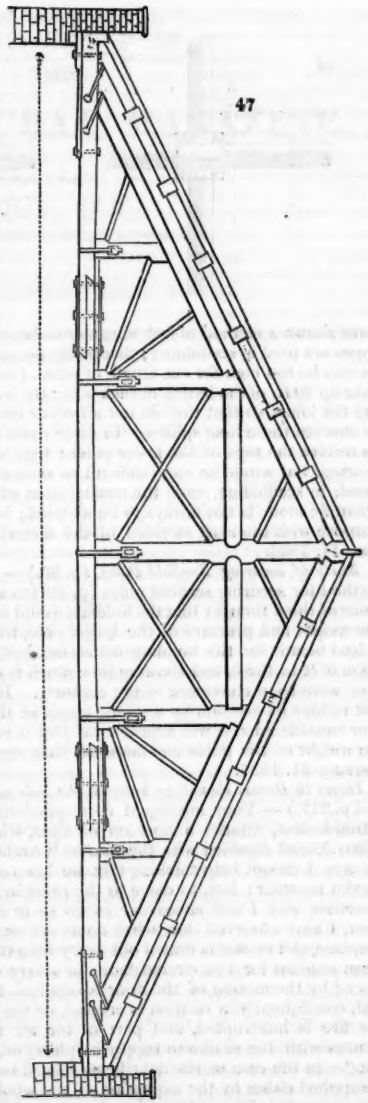

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Table of Scantlings, best Memel Crown.

Tie-beam - -	15 × 12
Crown and queen-posts	12 × 9
Straining-beam -	12 × 9
Principal rafters -	12 × 9
Assistant ditto - -	12 × 9
Common ditto -	3¾ × 2½
Purlines - -	8 × 5
Straining-sill - -	12 × 2½
Ridge - -	6 × 2
Struts 10 × 3½ and (*a a*)	10 × 4

The crown and queen-posts to be of good, dry, old oak. The tie-beam will carry 19½ tons; the weight of the truss, boarding and covering, is nearly 11 tons; therefore, for the ceiling floor, ceiling, and any other extraneous weights, upwards of 8½ tons are allowed.

Mr. F. Lush's Plan for fastening Scaffold Poles. — Your correspondent, Mr. F. Lush, must pardon a critique on his holdfasts for scaffolds. He advises that the "clip," or plate, should be ⅜ in. thick; whereas, if it were shortened in the laps, so as merely to admit of the screw-nuts turning clear, a plate of ¼ in. thick would be sufficent, as in *fig.* 48.; this will produce a saving in first cost that may lead to the adoption of the plan, as it would admit of boiler-makers' "snips" being used. In *fig.* 49. I

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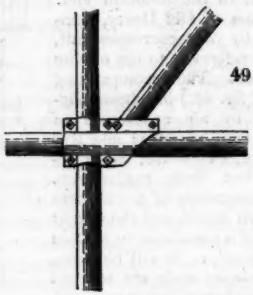

have shown a method of fastening a cross brace. Another case remains, where ropes are used in scaffolding; that is, the perpendicular splice, in such buildings as may be too high for one length of poles. (See Vol. I. p. 198.) These splices take up 20 ft. of the length of each pole: the iron "clip," and attention to break ing the joints, so that they do not all occur on one floor, or story, would go far to shorten these long splices. In some cases the upper poles might be bored, to receive the tops of the lower poles; they would then have a perpendicular bearing, but would be more difficult to raise and lower. It must be borne in mind, in scaffolding, as in the construction of centres, that the best and most scientific mode is not always to be adopted; but that which will answer the purpose with the least sacrifice of the materials. — *Wm. Thorold. Norwich, Jan.* 11. 1836.

Mode of securing Scaffold Poles. (p. 30.) — On showing my article on a method for securing scaffold poles (p. 30.) to some of my friends, I found that some of them thought that the holdfast would be in danger of slipping down by the weight and pressure of the ledger pole, together with the planks, and the ledged boards for the building materials; but, on my giving a further explanation of it to them, and showing how much it could be tightened by the screw, they were soon convinced to the contrary. If it is recollected that the holdfast retains its position by a strong staple at the top and bottom, secured by four suitable nuts, it will appear clear that it is much more capable of bearing the weight of the poles and materials than ropes. — *Frederick Lush. Hoxton, January* 21. 1836.

Doors to Rooms should be hung on the Side nearest the Fire. (Vol. I. p. 201. and p. 317.) — Your intelligent correspondent, Mr. Milne, very much to my astonishment, attacks a position of mine, which you had inserted (Vol. I. p. 201.), and dignified with the title of "Architectural Maxim." From what he says, I cannot help thinking that he has confounded the terms axiom and maxim together: but, to come to the point in dispute, I mean to maintain my assertion, and I will endeavour to do so in a philosophical manner. First, then, I have observed that, when doors are not hinged on the side nearest the fireplace, the smoke is drawn out every time they are used; secondly, I think I can account for this circumstance in a very simple way: the air that is displaced by the motion of the door is supplied by that which is near the fire; and, consequently, a vacuum is created, or the current of air that is feeding the fire is interrupted, and part of the air that had entered the chimney returns with the smoke to supply its place, or, in common parlance, it "puffs out." In the case of the door being hinged on the opposite side, the vacuum is supplied either by the expansion of the whole of the air in the room, or by some current, without disturbing the current of air that flows to the fire. — *T. W. Banks, near Barnsley, Sept.* 21. 1835.